

THE MEDICAL AND SURGICAL REPORTER.

No. 1274.]

PHILADELPHIA, JULY 30, 1881.

[VOL. XLV.—No. 5.]

ORIGINAL DEPARTMENT.

LECTURE.

ON THE DIAGNOSIS OF ABDOMINAL TUMORS.

Delivered at the Paris Faculty of Medicine

BY M. DUPLAY,

Professor of Surgery.

Translated for the MED. AND SURG. REPORTER.

GENTLEMEN:—We have passed in review, in the preceding lectures, most of the affections of the abdominal and pelvic viscera, paying particular attention to those which interest us at a surgical point of view, and as regards other species of tumors, retaining the facts necessary in order to form a diagnosis.

I have concluded to consecrate this last lecture to the diagnosis of abdominal tumors; it seemed to me that a consideration of the ground we have passed over would be a fitting conclusion of our studies, permitting us to make a résumé at a general and practical point of view.

But so vast a subject cannot receive proper attention in one lecture; for that reason I will take into consideration solely those tumors contained in the abdominal cavity, and which have a special surgical interest, either as regards diagnosis or treatment; those tumors which are confined to the pelvic cavity, or have not, as yet, progressed beyond its limits, will not be touched upon.

The diagnosis of abdominal tumors is never facile, and is often very difficult. Every case, no matter how simple in appearance, requires minute examination. Be on your guard against the too hasty formation of a diagnosis without sufficient

consideration, because the case appears too simple. Errors made in this way are without number, and even by skillful men, all the signs seeming to confirm the exactitude of the diagnosis. In every case, then, a minute and well-ordered examination should be made. We are happily rich in means of investigation; some long known, others conquered by modern science; it will be of service to recall them briefly to your recollection.

Inspection, which is the first means used in forming a diagnosis, will reveal to you the alterations in the external aspect of the abdominal parietes, the volume and the form, regular or irregular, of the abdomen, its lateral enlargement, as in ascites, or any prominence auguring the presence of a visceral tumor. Inspection shows also any change in the coloration of the integuments, and in some cases the dilatation of the subcutaneous veins. By the position and the manner the abdominal parietes is raised over a tumor, you will be able to form an opinion as to its seat, and from what organ it arises. You will examine your patients standing, and also in the recumbent posture, in order to determine what modifications in the shape of the abdomen are brought about by the change of position.

Palpation, the patient being placed in the position proper to relax the abdominal walls, will inform you concerning the limits, the form, and particularly the consistence of the tumor. It is by careful and skillful palpation that you will learn whether the tumor is fluctuating or resistant, liquid or solid, or containing at the same time liquid and solid constituents. Palpation will determine also if the tumor is mobile, and in what direction it may be moved, whether

laterally, from below upward, or *vice versa*; you will seek whether there are any movements of expansion in the tumor itself, or provoked by the respiratory movements. You will thus also be able to appreciate its relations with neighboring organs, and at present we are able to recognize by palpation when certain abdominal organs, the liver, the spleen, are hypertrophied or displaced. By displacing the skin over the tumor, or moving the latter while the skin is maintained immobile, some friction sound (*frottement*) may be rendered evident; long and attentive pressure over the tumor will reveal the existence of pulsations, if they are present.

By *percussion* the tumor may be circumscribed within certain limits; there is dullness, which is fixed or changes place, according as the tumor is mobile or not; a point of origin may be assigned to a tumor also as the dullness is continuous with that of a neighboring organ, or on the contrary separated from it by a zone of clear resonance.

You are aware by what modifications of percussion the sensations accompanying displacement of liquid, gurgling, hydatidic thrill, collision of calculi (in the gall bladder, kidney) are obtained.

Auscultation enables us to recognize the existence of friction sounds, of vascular murmurs; to detect the heart sounds of a fetus, or again the soufflé of an aneurismal tumor.

To these different means you will add the exploration of the abdomino-pelvic cavity by the natural orifices.

Rectal exploration is rarely of great service in the cases of abdominal tumor which we have at present under consideration; sometimes, however, it will demonstrate the presence of prolongation or extension of the tumor into the pelvis. Rectal exploration by the method of Simon (of Heidelberg), if indeed the term method can be applied to such manœuvres of effraction, which consist in introducing successively the hand and then the forearm into the rectum, is not exempt from danger, for death ensued in several cases; I have mentioned it only in order to condemn it.

Vaginal touch will furnish precious and important information regarding the condition of the cervix and uterus, as to whether the organ is depressed or not; concerning the changes in the form, volume, consistence and direction of the organ; on the state of the culs-de-sac and the relations of the tumor with the pelvic organs.

Even when negative, vaginal exploration is of service, and should never be neglected. Nor

should the bladder be passed over without examination, the extreme dilatability of the urethra in women rendering its exploration facile. You all know that suspected tumors have sometimes been instantly cured by catheterism; again the introduction of a catheter will inform you concerning the relations of the tumor with the bladder, and will allow you to recognize any deviation or adherence of the urinary reservoir or of the urethra.

By combining palpation of the abdomen with rectal or vaginal exploration, or again with catheterism, some precision regarding the relations of the tumor with the pelvis, the abdominal parietes and the pelvic organs, may be arrived at.

Puncture with the needle of the aspirator is entirely innocuous with the apparatus at present in use, and offers immense advantages for diagnosis. By such means you will be able to determine definitively whether the tumor is solid or contains liquid, and, if so, the nature of the liquid; and thus finally, by the aid of chemical and microscopic examination, the nature of the tumor and its origin. The disappearance, complete or partial, of the tumor after puncture will demonstrate whether it is uni or multilocular, and whether it adheres or not to the neighboring organs.

Any incision as a means of exploration should be reserved for cases which remain obscure notwithstanding the employment of all the preceding means of investigation, and then only when the life of the patient is menaced.

Such then, gentlemen, are the means placed at your disposition for the diagnosis of abdominal tumors. We will now consider in what manner this diagnosis may be arrived at.

In the first place, you will obtain from the patient an account, in detail, of the malady, noting particularly the functional troubles or their absence; the period when the tumor first appeared and in what direction it has developed, whether laterally, from above downward, or *vice versa*; and also whether the enlargement was gradual or more rapid at some periods than at others; you should also inform yourself whether there has been pain at any period or not. Being thus informed, and guided by the replies of the patient, you will be able to enter upon the local examination of the tumor, according to the rules we have already laid down.

When you have first clearly established the existence of a tumor, you can then proceed to determine its seat and nature.

Sometimes the tumor seems to occupy the entire abdomen, while in the other cases, on the contrary, the affection seems to be clearly limited and circumscribed; whence the first grand division of abdominal tumors into diffused and circumscribed tumors.

We will consider first the diffused tumors; this part of our task once done will render the remainder more facile. The affections which give rise to the sensation of a diffused tumor of the abdomen are, fatty surcharge of the peritoneum, the gelatinous disease, chronic peritonitis and ascites.

You will recognize the fatty surcharge by the tumors formed by the fat infiltrating the serous layers; they have no precise limits, are soft and without fluctuation. The embonpoint is generalized and the abdominal parietes are loaded with fat. It is particularly in women who have borne many children, or at the period of the change of life, that you will meet with this exaggerated development of fat in the cellular tissues; which may be taken for a tumor. We are now well acquainted with the gelatinous disease (*maladie gelatineuse*), so rare and so difficult of diagnosis, recognizable, however, by the fluctuation without change in the dullness, the constant pain, the alteration in the general health of the patient, and by the qualities of the small quantity of liquid obtained by puncture.

Chronic peritonitis, in its different varieties, is characterized by inflammatory antecedents, symptoms of derangement of the digestive organs, sensibility of the abdomen on pressure, and the state of general cachexia; also by the unequal distribution of dullness and clear sound, while palpation reveals here and there portions hard and solid, with other portions just beside them less resisting or even fluctuating.

I do not wish to return on ascites, concerning which I have spoken several times; you are sufficiently well acquainted with the symptoms and signs. I must, however, call to your attention the frequent coexistence of ascites with an abdominal tumor. You are aware that by suddenly depressing the abdominal parietes, ascitic liquid is displaced, and the presence of a tumor may be made evident. Superficial puncture, the trocar not being deeply introduced, will permit the evacuation of the ascitic fluid, and will enable you to perfect your diagnosis, at the same time that you may form some conclusion, from the nature of the liquid evacuated, regarding that of the subjacent tumor.

We will suppose that your examination has

demonstrated the presence of a circumscribed tumor; you should then seek to determine whether the tumor is really intra-abdominal, and not limited to the abdominal parietes.

The tumors in the antero-lateral part of the abdominal wall, cysts, fibromas, etc., are generally distinguished with facility from intra-abdominal tumors; they may generally be isolated by raising up the integuments with the fingers; again, the abdominal parietes move when the tumor is displaced and with it, while intra-abdominal tumors are mobile and the movements of displacement are independent of those of the integument. There are, however, difficult cases, where the tension of the abdominal parietes is extreme, or where the intra-abdominal tumor has very little mobility. When you find it impossible to pinch up the integuments over the tumor, and thus compare the thickness of the abdominal wall at this point with that at other points of the abdomen, you may force a fine and long needle into the centre of the tumor, and if the movements observed in the needle externally are isochrone with the respiratory movements, the tumor is intra-abdominal. The tumors of the posterior parietes, retroperitoneal, aneurisms, solid tumors, etc., which become enlarged toward the abdomen, are much more difficult of diagnosis, with the exception of aneurisms, which are recognizable by fixed signs; you can but suspect their origin and nature in the great proportion of cases.

If the tumor is found to be intra-abdominal, it remains to determine its point of origin. All the organs in the abdomen, digestive tube and its accessory organs, genito-urinary apparatus, serous lining, may give rise to tumors, and you will often be much embarrassed; but you will be often successful if you pay particular attention to the antecedents of the patient, to the sex, the relative frequency of tumors and the symptoms peculiar to each variety. We will briefly recall the principal.

The tumors of the liver and spleen are developed from above downward; their dullness on percussion is continuous with that of the organ; sometimes the hypochondrium over the tumor is very prominent, and the ribs pushed outward; when the tumor is very large it may invade the thoracic cavity, and in such case the respiratory movements have an influence on it.

Among the tumors of the liver the abscesses and the cysts interest particularly the surgeon; and in examining them we have already insisted on the research into the antecedents of the patient, on the utility of puncture with the

aspirator, the research for fluctuation, etc. We have also learned to recognize, by the seat and the form, the tumors formed in the gall bladder by retention of the bile or by a mass of calculi in the organ.

It is not very difficult to recognize the tumor formed by a hypertrophied spleen: the delicate point consists in determining whether the hypertrophy is idiopathic, and calls for surgical intervention, or, on the other hand, if it is due to amyloid or fibroid degeneration, or to long exposure to miasmatic conditions.

In general, tumors of the kidney are recognizable by their situation and mode of development; the tumor originating in the lumbar region is developed from behind forward; ultimately it will tend to descend toward the pelvis. The situation of the colon and its relations with the tumor are of great importance; when the volume is not too considerable the clear sound (*sonorité*) of the ascending colon is found anteriorly to a tumor of the right kidney, and the dullness of the tumor above is separated from that of the liver by a zone of clear sound over the transverse colon; the same is true for the descending colon and the left kidney. When the tumor is sufficiently voluminous to compress the intestine, and change its relations with neighboring organs, these relations may be re-established by injecting air, by the anus, into the colon.

You should not neglect the research of functional disorders, revealed by the actual or anterior existence of urinary troubles; nephritic colic, hæmaturia, urines containing pus, gravel or hydatid vesicles. Palpation and puncture will aid you in distinguishing solid from liquid tumors. Finally, floating kidney will be recognized by the form of the tumor, which reproduces that of the kidney, and is smooth, like that organ; this last could be confounded but with an accumulation of feces, which has neither the same form nor consistence; again, the form of this last may be modified by pressure, and purgatives cause complete disappearance of the tumor.

We have, gentlemen, passed successively in review the tumors which are developed from above downward, and those increasing from behind forward; we will now cast a rapid *coup d'œil* on the tumors which invade the abdominal cavity from below upward; I speak of those tumors which originate from the uterus, ovaries, etc.

Besides their mode of development, they are accompanied generally by functional troubles of variable nature, accidents due to compression,

and they are more or less accessible to rectal, vaginal, or vesical touch, which will inform you concerning their relations with the pelvic organs.

But, before entering on the consideration of the differential diagnosis of these tumors, it is proper to draw your attention to two frequent causes of error: The development of the uterus containing the product of conception, and the tumor formed by the bladder distended with urine. You have been already cautioned concerning these sources of error; I repeat the caution; and even then, gentlemen, I would not dare affirm that you will not commit, at least once, this mistake.

This error, which appears so gross, is an every-day occurrence; what surgeon is there who has not received, at the hospital, or at his consultation, patients supposed to have cysts or fibromas, who had but a retention of urine, or were pregnant?

The means of avoiding this error is nevertheless facile; it suffices to think of these accidents in every case.

No matter how improbable it may appear that the person should be pregnant, in spite of her indignant denials, you will always search for the general or local signs of a normal or extra-uterine pregnancy. Even when the patient asserts that she passes urine regularly, you will introduce the catheter, to convince yourself that the patient does not pass water more or less regularly by regurgitation, although the bladder may be distended by three, four or six quarts of urine.

We now arrive at the consideration of those tumors of the ovaries and uterus which have been more specially the object of our lectures this year; as I have insisted on their differential diagnosis in treating of each, it will suffice to refresh your memory by recalling their general features (*traits généraux*). For tumors of the uterus (myomas, fibromas and fibro-cystic) you will have recourse particularly to palpation and exploration by the natural orifices, combining the two; you will make a careful research for functional troubles; with puncture, to decide between fibromatous and fibro-cystic tumors. The mode of development, which is lateral, the relative independence of the uterus demonstrated with facility by vaginal exploration combined with palpation, are the principal characteristic signs of ovarian tumors; attentive palpation will permit an opinion regarding the nature of the tumor by the study of its surface and consistence. But puncture alone will give you

exact information regarding important points; whether the tumor is uni or multilocular, free or adherent; finally, the analysis of the liquid, and the elements (*éléments figurés*) which it may contain (calciform cells, sebaceous matter, hairs, etc.) will give important results regarding the nature and origin of the tumor. I would recall to you that the cysts of the large ligament (cysts of the parovarium) contain a liquid which is serous, very limpid, not albuminous.

No matter in what region of the abdomen the tumor is situated you will be on your guard against cases of encysted circumscribed peritonitis at the superior part of the abdomen; this condition is often an effect of the tumor of which it complicates the diagnosis; at the inferior portion, this form of cyst around the uterus, which it displaces, will be recognized by vaginal touch, mode of debut, inflammatory antecedents, etc., and if necessary, by puncture with the needle of the aspirator. Such cases of peritonitis toward the centre of the abdomen have no relation with neighboring organs; it is by the etiology and minute study of the antecedents that a diagnosis may be arrived at.

And tumors of the omentum should not be forgotten, no matter how rare; they can be recognized generally by their situation; in front of the intestine, on the median line, oftener below than above the navel. The tumor is spread like an apron, is relatively superficial, of unequal consistence over its irregular surface; it is nodulated, of great mobility, laterally and from below upward, and does not induce functional disorders of great gravity as do other tumors of the region.

After this rapid review, in which I have attempted to bring before you the sources of error and the difficulties attending the diagnosis of abdominal tumors, I think you will have been impressed with the fact that this is one of the most difficult chapters of practice and clinical medicine.

COMMUNICATIONS.

TYPHLYTIS—PERITYPHLYTIS.

BY T. CURTIS SMITH, M.D.,

OF Aurora, Indiana.

These two diseases and inflammation of the appendix vermiformis are not only quite nearly associated in their anatomical relations, but also in their symptoms of inflammatory involvement. This is so to such an extent as to render it

quite difficult to differentiate between them at the outset of an attack.

To Prof. Bartholow, now of Philadelphia, is due, perhaps more than to any other in our day, the credit of giving careful attention to these diseases, in all their phases. In his late work on practice, he says: "The term typhlytis is restricted to an inflammation of the cæcum and its appendix. Perityphlytis is an inflammation taking place in the loose connective tissue on which the cæcum rests. Although the seat of the lesion and its nature are very different, it is necessary, because of their intimate relations, to consider them together" (pp. 69, 70).

The practitioner will not meet with many of these cases until he will experience great difficulty, early in the attacks, to differentiate between them. Often obstruction of the bowel may render the diagnosis still more obscure.

"Typhlytis in the mild form is distinguished from other affections of the bowels by the local pain and soreness, by the fullness without impaction; in the severe form, the symptoms of obstruction are the same as in other forms of occlusion, but the local pain and the distinct enlargement of the bowel indicate the existence of an inflammation and fecal obstruction of the cæcum. In these affections the decubitus of the patient is an important aid to diagnosis. Chronic catarrh of the cæcum is recognized by the locality of the distress." (Bartholow, p. 72.) From cancer of the cæcum there are no means of differentiation early in the disease; but later the cachexia, the nodulated tumor, the slowness of the progress, with gradually increased pain and constitutional disturbance, will mark the malignant from the simple inflammatory cases.

The most common causes of these affections are the lodgment of a foreign body in the folds of the cæcum or appendix, or of fecal concretions, fecal impaction, exposures to cold, blows, severe strain from lifting or sudden twist of the body. I well remember a case reported to the Cincinnati Academy of Medicine verbally, by Dr. Fries, nearly twenty years ago, where, after long and serious trouble from inflammation commencing in the right iliac region, and involving the peritoneum and to a large extent the abdominal walls, forming sinuses in several places, and even forming them in the scrotum and about the penis, the case finally made a good recovery after discharging some grape seeds from one of the openings in the groin. (I think it must be the same case reported by him to Dr. Bartholow, and mentioned, with others, in the *American Journal of Medical*

Science, for October, 1886, p. 354.) Dr. J. W. S. Gouley relates a case (*Virginia Medical Monthly*), where an artificial tooth swallowed two years before was the supposed exciting cause of typhlitis. I well remember a case treated by myself and others for several different attacks, where the affection always seemed to be produced by eating seedy fruit, or any food quite difficult to digest. Foreign bodies, or intestinal concretions acting as such, may light up cæcal inflammation at almost any time, and in almost any person.

When we consider the anatomy and physiology of the parts involved, and the mechanical causes of inflammation of these tissues, the wonder is, not that we meet with so many such cases, but that we meet with so few of them. I have met with cases where exposure to cold was the exciting cause, as near as could be learned, and others where a severe blow acted as such. I distinctly remember the case of a coal miner who, having finished his day's work, had gathered his tools to go home, when, on turning around toward his path, his foot slipped suddenly. He felt a sharp pain in the right iliac region, which grew steadily worse until severe inflammation marked distinctly the character of his trouble. A case apparently caused by "stooping low in order to pass under a fence" is named by Bartholow (*American Journal of Medical Science*, October, 1866, p. 357), from the practice of W. Sly, Esq., of the British Army. I have seen it set up in one case several times by riding on horseback. I have at this writing a case of severe perityphlitis in a young lady of ordinary good health, seemingly caused by lifting some heavy domestic articles, while engaged at the usual spring house-cleaning. I remember other cases where no one cause could be named as exciting the inflammation. In February, 1880, I treated a very severe case, in a lad of twelve years, in whom the attack was certainly caused by rolling in the snow while coasting on the hill near his home.

As these diseases are barely mentioned by our works on practice—Bartholow's excepted—and by most not noticed at all, I shall enter into a detail of symptoms more fully than would otherwise be justifiable in an article like this one, simply intended for the current medical literature.

The first and most continuously prominent symptom is pain, more or less severe, in the right iliac region, which in pure typhlitis is confined quite closely to the cæcum, but may be reflected along the course of the colon. There will be

marked tenderness on pressure, and soon a tumor can be felt, in size that of a walnut to a very large orange. Pain is proportionate to pressure. The limb will most likely be partially flexed, and the abdominal muscles will move as little as possible in carrying on respiration. The body is turned somewhat to the right side and flexed toward the inflamed parts, to secure muscular relaxation there. The soreness or pain is increased on standing or lying straight. In the mild attacks there is no impaction, but this is present in severe attacks. In either case the outline of the inflamed section can be distinctly made out. It will generally have a boggy feel. There is usually a constipated state of the bowels, vomiting generally present, often obstinate. The general system is soon affected, pulse quickened, temperature increased, tongue coated, appetite gone. These increase in proportion to the severity of the local affection, and the general depression early becomes well marked. In perityphlitis, the pain, though centering in the right iliac fossa, extends over much of the abdomen, even as high as the stomach at times; there is pain in the hip and down the inner face of the thigh, caused by pressure on the nerve trunks; sometimes there is œdema from pressure on the veins. When the appendix vermiformis is inflamed, whether alone or from extension of the inflammation to it from the cæcum, the pain reaches lower down, nearly or quite to Poupart's ligament; pain in the groin, hip and thigh. There is greater pain and tenderness and less disturbance with the action of the bowels than in either of the other forms.

The tendency of perityphlitis is more to supuration than in typhlitis alone. Inflammation of the appendix is very apt to extend to the peritoneum, and perhaps more liable to result in ulceration and fecal fistula than either of the other forms.

Prognosis.—Under prompt and proper treatment generally favorable, but the disease may terminate fatally under the best management. It is a disease requiring close attention and the very skillful use of the remedies needed to combat it. At no time can the physician afford to trifle with these cases, however mild they may seem to be. Sometimes the ulcerative process is insidious and we have perforation of the bowel and the resulting peritonitis on our hands before we may anticipate danger.

The most favorable terminations are by resolution or discharge of the pus, if formed, through the bowel. If the abscess open externally, a fecal fistula may result, and often death, or, as

in Dr. Fries' case, before referred to, long months of miserable suffering before recovery is finally reached, and then only after severe surgical procedure.

My observation, if to be relied upon, has plainly taught me that when a person has once been the subject of an attack of either form of this disease he seems to be rendered far more obnoxious to it than before. In one case it recurred once in about four months from the first attack; then the case passed out of the neighborhood, so that I cannot give further account of it. In another case there were, within three years' time, at least five distinct and quite severe attacks; the last resulting in abscess, opening in the groin, which soon healed. After this there was far greater immunity from attacks.* Whether a foreign body was the continued local cause in this case, and discharged at the time of opening in the groin, or not, I cannot tell, as this occurred in a distant city, and the patient did not know.

Prof. Bartholow, in the paper published in 1866, before referred to, cites several cases that terminated in fistulous openings and death. Dr. Gordon Buck refers to cases requiring early operative interference, in consequence of the occurrence of suppuration, and to prevent its discharge into the peritoneal cavity—thus peritonitis and death.

In one case, treated by me, the walls of the abdomen seemed to be weakened, so that a hernia in the right groin occurred soon after recovery, without any other known cause for such a result.

I shall now relate, as briefly as may be, a few cases that have come under my hands, and in doing so give the manner of treatment which I have usually pursued, and which has so far proved entirely successful in every case. This uniformly good success has, in perhaps two instances, been more the result of good fortune than of any special skill upon my part.

Miss N., aged fifteen, of scrofulous habit, very delicate constitution, sallow complexion. Was called to see her October 18, 1870. She had been confined to bed for some days with severe pain in the right iliac region. I found there a tumor, the size of a large orange, very tender to the touch, and very painful. Bowels had been freely evacuated by domestic physic a few days before. The diagnosis was plain. I gave her large doses of opium, to allay pain and confine

the bowels, ordered warm poultices constantly over the tumor. The decubitus here, as in nearly all these cases, was an inclination to the right side, with the limbs drawn partly up, also the body much flexed, semi-laterally, so as to relax the abdominal muscles on that side. There had been distinct rigors and excessive diaphoresis before I saw her. The pulse was small and weak; often there had been free emesis; the fever was high, and the general system was sympathizing greatly in the local trouble. There was no general peritonitis, the whole trouble being distinctly confined to the one locality. To the remedies above-named, fluid nourishment, milk and beef essence, were regularly given, and later quinine and whisky quite liberally. I continued to see her daily. On the 29th I was gratified to find that she had discharged, per rectum, a large quantity of pus, and, though very feeble, was feeling much better. From this date onward there was rapid improvement, under tonics and careful feeding; no recurrence of the attack.

In this instance it was evident there was pus already formed when I first visited the case. At no time was there any symptom to indicate the near approach of the pus to the surface, to warrant me, as I thought, in the use of the knife. In the light of subsequent experience, and of reported cases, where the knife has and has not been used, I have no regrets to offer here, that I withheld all operative interference. It is true, the use of the knife may be deferred too long; but there can be no greater risk in too long deference, than there is in needlessly opening the abdominal cavity, which is especially dangerous when the enclosed tissues are already engorged or in an active state of inflammation. My good fortune here was fully as valuable to the patient as my practice. In a somewhat similar case—as to immediate symptoms, but involving the tissues more extensively—Dr. J. W. S. Gouley, with the concurrence of Dr. Willard Parker, made a free incision, evacuating a large quantity of flaky pus. (COMP. MED. SCI., July, 1875, p. 207.) Dr. Parker is an advocate for the use of the knife in cases where there is distinct evidence of the formation of pus within the tumor. Dr. Buck, of New York City, a high authority, says, "The proper treatment, which has been successful in my hands, is this: upon ascertaining the existence of the abscess, I, without waiting for fluctuation to establish itself, make an outlet for the matter below the outer half of Poupart's ligament, and parallel with it, first through the integument, exposing

* A professional friend recently related to me a case where a second attack occurred after a lapse of some years. In Dr. Gouley's case, before referred to, there was a recurrence of the disease.

the fascia of the thigh. This fascia being divided, you pass under the ligament, and get behind the iliac fascia. The incision thus made is to be kept open by a plug of lint, renewed every twenty-four hours." (*American Journal of Medical Science*, October, 1866.)

This may well be termed the heroic plan. I hope I may, without being esteemed presumptuous, be permitted to pronounce severely against this plan so early in the diseased process. That there is danger in such an operation is certain. On the other hand, one may wait too long when the indications for surgical interference seem plainly indicated. Dr. Bartholow does not favor the use of the knife as commended by Dr. Buck, though it may be necessary in some cases.

CASE 2.—J. G., aged thirty-four, coal miner, stout, robust, excellent health, sanguineous temperament, full habits, temperate, industrious. I was called to see him January 14th, 1873, when I learned the following history: He had been about thirty-five miles away from home, at work, during the preceding autumn and winter. Early in December had an attack of what his physician—Prof. D. T. Gilliam, now of Starling Medical College—had called typhlitis, but recovered so far as to be able to resume his work in about three weeks. Not feeling well again, he had started home a few days before I saw him, and had grown rapidly worse.

I found him with considerable fever, pulse 110, full and strong, tongue white, nausea, some emesis, and very severe pain in the right iliac region, where there was a distinct tumor, as large as an orange, very tender. The bowels had been regular until to day, urine free. Diagnosed typhlitis. Gave him morphia hypodermically, which soon moderated the pain, also opium, grs.ij every hour until the pain should be controlled, then to be given as often as pain might indicate its use. Sinapisms and hot stupes over the affected region. Diet to be strictly fluid.

On the 15th I found him comparatively comfortable, but a tendency to a return of the pain whenever the anodyne was omitted for any considerable time; pulse 100, skin moist, tongue dry, coated white, urine not free, no nausea, no appetite; treatment continued. From this date on the inflammation slowly but steadily subsided. No attempt was made to move the bowels until all tenderness had disappeared. This was on the 26th, or thirteen days after the treatment began. He was then given small and often repeated doses of magnesia sulphate,

and every six hours a full enema of warm suds. No movement was secured until the 29th, after which there was rapid recovery, under tonics and good diet of a fluid character for a few days. The recovery from the first attack was probably not complete, hence the relapse.

This was purely, in my judgment, a case of typhlitis. The case terminated very favorably, and within a reasonable time, but I now think the bowels might have been moved sooner than they were, with advantage to the patient; also, that a blister over the tumor applied early would have been of great advantage. It is true that a blister interferes to some extent with future inspections of the tumor, but its advantages more than counterbalance this loss. I have found no one topical remedy as effectual, early in the disease, as a large blister, always preferring the blistering collodion to the cerate plaster, if it can be had, as it is less heating and of less weight. To move the bowels, when the proper time arrives for it, sulphate of magnesia, in small, often repeated doses, is far superior to most other remedies, as it softens the fecal matter and renders a semi-fluid stool, which can do little or no harm in passing over the inflamed parts. Castor oil and cathartics of its class are not admissible in these cases, for very apparent reasons.

CASE 3.—B. L., aged twenty-two, delicate constitution, tubercular diathesis, very light complexion. Was called to see him in June, 1875. He had had at least two severe attacks previous to this one, while away at college, in one of which his life was despaired of. He was then treated by Prof. Whittaker, of Cincinnati. I found him with very marked systemic disturbance, vomiting, nausea quite constant, pulse 120, weak, temperature 102°, abdomen tympanitic, and very tender in the right iliac fossa, with pain radiating far over to the right side, and up toward the stomach; there was pain in the right hip and thigh; decubitus that of the limbs drawn up and body flexed toward the right. Bowels had already been moved with sulphate of magnesia, the day before, after which he had taken morphia, and applied emollient poultices. I gave him morphia and atropia hypodermically, and opium freely by mouth, also quinia, grains five, every six hours, fluid diet, and milk with brandy, every three to four hours. He seemed to need sustaining right from the start, as he was already prostrated. A very large blister was applied, which filled well, and was kept discharging for some days. He was allowed ice at will, perfect quiet enjoined. The diagnosis was peri-

typhlitis, for the peritoneum was evidently involved to a considerable extent, and the tumor reached low enough to press on the nerves supplying the hip and thigh, hence the pain there. Pain is not as apt to be found in the hip and thigh in typhlitis as in perityphlitis, if my observations have been correct.

For four days this case continued about as above described, the temperature ranging from 102 to 105°, pulse from 120 to 135, at times remittent. The treatment in the main was as above indicated. On the fifth day of my attendance (the sixth from date of attack) I found the temperature 100°, pulse 108, weak, tongue showing signs of cleaning; patient, though greatly prostrated, was feeling more hopeful, and thought he was on the verge of convalescence. As no action of the bowels had been allowed since my first visit, and the tumor and tenderness were now disappearing, I ordered a teaspoonful of sulphate of magnesia every four hours, until it should produce action. The emollients, opium, quinia, stimulants, liquid food, were continued. Less opium was needed, but more stimulants and food. Perfect quiet was enjoined for some days to come. Under the use of these means, modified as the changes in the case demanded, he was able to sit up in another week, and soon recovered. The salts operated on the second day after commencing their use, being aided by an enema of warm suds. The stool was semi-liquid, produced but little pain, and afforded great relief. After this the tumor rapidly disappeared. No pus discharged, as far as observed.

This young man had several light attacks of this affection after this. In the autumn of 1876 he went to Philadelphia, where he entered the Homœopathic College of that city. While there he was severely attacked with this same disease; was treated by the College Faculty; an abscess formed and opened externally. Whether any foreign body was discharged I did not learn, nor did the young man know. When I saw him, a few months later, on his return home, he was greatly broken down, emaciated and anæmic. There was tenderness over the site of the affected region. He moved his headquarters to some point in Colorado, and I never learned his subsequent history as to other attacks.

The cause of the first attack in this case I do not know exactly, but I think it very probable that some hard concretion or foreign body lodged in the folds of the cæcum or appendix, and was not discharged, if at all, until the abscess formed and bursted externally. (It was

not opened by any surgeon.) The attacks following the first were excited by any smart jarring, as by horseback riding, or by constipation, or over exertion in any way. Constipation was always ready to light it up, if allowed to exist. It is not improbable that this case might have been brought to a favorable termination in any one of its attacks by allowing it to run to the formation of pus in the tumor and then using the knife judiciously, in order to allow the discharge of any foreign body lodged in the cæcum or appendix. But I do not feel that any one would be justified in permitting suppuration and the dangers growing out of it purposely, in any of these cases, on the mere suspicion that the plan above indicated might be best.

CASE 4.—J. C. S., aged twelve years, small for his age, generally well, has had, some years before this, two attacks of pneumonia; otherwise healthy. He was attacked one Friday morning in February, 1880, with severe nausea and vomiting, pain in the stomach and bowels; there was active diarrhœa through the day, for which antacids and anodynes were used quite freely. This was the history I obtained when I saw him, about 10 A.M. His pulse was 120, weak, extremities cold, and there was marked prostration. The anodynes allayed his pain; after several very free evacuations his bowels ceased to act, and he seemed quite comfortable. But for the high fever in the evening, with rapid, feeble pulse, I should have expected but little further trouble in this case, as the lad had eaten heartily at breakfast, and had manifested all the usual symptoms of cholera morbus, and nothing more.

About 8 A.M. the next morning he was attacked with severe and persistent pain in the right iliac region; the pulse was 120, temperature 103°; considerable nausea, great general prostration. The pain was confined to the cæcum, where there was very great tenderness and marked tumefaction. I gave morphia, to allay the pain, and applied a blister of cantharidal collodion. It required the very free use of morphia sulphate to allay the pain. This case continued for eight days before decided convalescence was effected, during which the temperature ranged from 102 to 106°, the pulse from 120 to 140, with frequent severe paroxysms of pain, in spite of the free use of anodynes, blisters and emollients. There were several free evacuations during the second and third day, notwithstanding the use of the morphia. After that the bowels were locked up and there was less suffering from severe pain. The diagnosis was typhlitis, though the continued movements of the

bowels would make it appear that it was inflammation of the appendix. But it must be remembered that the case started out as one of cholera morbus—acute dyspepsia—resulting from overloading the stomach, and this I think sufficiently accounts for the continued action of the bowels. Besides this, the pain did not extend below the cæcum, or well down in the groin, as it is apt to do in attacks of inflammation of the appendix.

The line of treatment was as already indicated in this and the preceding cases. The lad was not permitted to go out of the house for three weeks, was kept on comparatively fluid diet, until the last vestige of tenderness and tumefaction had disappeared. No relapse has occurred in this case, though there were slight indications of it twice afterwards, but absolute rest and strict observance of diet seemed to prevent further trouble. One incident in the subsequent history of this case is, that about eight months after the attack of typhlitis a right inguinal hernia made its appearance. Whether the one had any relation to the other is more than I can say. Probably not. I simply state the fact.

The first cause in this case was probably cold. The day previous to his first illness he had been out for several hours, with other school-boys, with their sleds, coasting, during which he became quite wet, from rolling in the snow. From this he did not feel well on rising. However, he ate a hearty breakfast of hot cakes, butter and molasses, and was attacked with the symptoms before named, followed within twenty-four hours by pretty well defined symptoms of typhlitis.

CASE 5.—Miss G., aged eighteen, nervo-sanguineous temperament, generally in excellent health. I was called June 4th, 1881. I learned that she had been house cleaning, and doing unusually heavy lifting the three preceding days, and while lifting felt sharp pain in right iliac region, but did not complain at the time. Had gone to bed the night before seemingly as well as usual, but about 4 A.M. roused the family, on account of severe pain in the stomach and bowels. The trouble increased until I saw her, at 10 A.M. June 5th. I found excessive nausea and vomiting of bitter, greenish fluid, severe pain, referred to the stomach, but some pain all over abdomen, very tender to pressure, pulse feeble and very rapid, severe headache, pupils dilated; bowels had been moved the day before.

Treatment.—Morphia sulphate, grs. $\frac{1}{2}$ every half hour until relieved. Cerium oxalate, grs. iij

as often as nausea required it. Large sinapism over the abdomen.

June 6th, 10 A.M. Pain and nausea relieved in two hours after my visit, but there is tenderness in the right iliac region, which her mother thought was due to approaching menses. Temperature 99°, pulse 96, tongue pointed, furred, white, edges and tip very red, and no appetite. Treatment continued, and added sulphate magnesia, \mathfrak{z} iv every four hours until operation is secured.

June 7th. Condition quite the same, but seemingly less tenderness and some amelioration of symptoms.

June 8th, patient spent the day before quietly, until 7 P.M., when she had a severe paroxysm of pain in the right side, which the mother relieved with the morphia prescribed at first. This morning pain returned. I saw her at 10 A.M. Temperature 101°, pulse 120, feeble, pupils dilated, some nausea, severe and persistent pain in right iliac region, very tender, tumefaction extending over a large space, reaching along the course of the colon; also much pain in right hip and inner face of right thigh; decubitus very distinctive. The salts had operated the day before; kidneys had acted freely; menses not present. Diagnosis, perityphlitis. Treatment: morphia, grs. ss at first, and one fourth grain every half hour until easy, then every two hours regularly until fully under its influence. Large blister over the affected portion, nourishment strictly fluid, ice and water *ad libitum*.

At 6 P.M., temperature 102°, pulse 124; there is very marked prostration; no food taken; there is less pain, by far, but very great tenderness. Treatment same, but added quinia sulphate, grains two, every four hours. These symptoms continued with little abatement, and demanding a full dose of morphia every two to three hours, until the 13th inst. The pulse ranged from 120 to 135, temperature from 101 to 104°. No new symptom appeared during this time, except the menstrual discharge appeared on the 9th. On the 14th I found the pulse 100, temperature 99°; tongue cleaving; a little desire for food; decidedly less tenderness and tumefaction; general appearance indicated approaching convalescence. Treatment: morphia as needed, to meet even slight pain whenever required; quinia continued, also warm, moist hop bag, which had been steadily used after 8th inst., placing it over the dressing of the blister. I now also add magnesia sulphate, \mathfrak{z} j, every four hours until movement is secured. Throughout the entire management of this case perfect rest was enjoined, and

the diet was two ounces of milk every three hours, and of the best *beef essence*, one ounce, in lieu of the milk. On the 16th had a free passage following an enema of warm suds. Some pain while over the stool, but none afterward. I now ordered the quinia continued, nourishment to be largely increased, but strictly fluid, for at least ten days, also to attempt no movement within that time other than simply slipping into a large easy chair at the bedside to relieve the irksomeness of lying so long. From this date on there has been steady improvement. There was, however, on the 16th, still a distinct tumor, as large as a common hen egg, tender on pressure, which gradually subsided. These cases are few in number, but as far as they go they teach us that—

1. These diseases may result from apparently slight causes.
2. They are very liable to a recurrence of attack.
3. There is marked tendency to suppuration and fecal fistula when the peritoneum and cellular tissue are involved.
4. Operative interference is seldom required in early and well treated cases.

HOSPITAL REPORTS.

COLLEGE OF PHYSICIANS AND SURGEONS, NEW YORK.

CLINIC BY FRANCIS DELAFIELD, M.D.,

Adjunct Professor of Pathology and Practical Medicine.

Diabetes Mellitus.

GENTLEMEN:—This man, aged about 53 years, tells us that he has not been feeling well for some time, although he used to have good health; and about Christmas he began to feel so ill that he consulted a physician. He has lost some flesh, although he is rather a fleshy man yet. He has great thirst, and at one time he passed about six quarts of urine in the twenty-four hours, and he thinks that now he passes about four quarts. The doctor whom he consulted, about Christmas, examined his urine and said that he had diabetes. He gave him a medicine which he does not know the name of, and told him to eat Graham bread, or rather the gluten bread manufactured by the Health Food Company of this city; and he also told him not to use any sugar. These instructions the patient says he has carried out.

On examining his urine now, with Fehling's solution, you see it gives the characteristic reaction for sugar very well indeed. There is a precipitation, of the sub-oxide of copper on boiling the urine with Fehling's solution. I should judge, roughly, from this, that there is a considerable amount of sugar in proportion to the amount of urine, and he is passing about four quarts of urine in the twenty-four hours.

This man is a very good sample, then, of

a common enough set of cases of diabetes, under the general name of diabetes, or diabetes mellitus—people who pass an increased amount of urine with sugar in it. You will find in practice that there is a very great difference in different cases; that merely calling them diabetes tells you what the disease is, but it does not tell you at all what the result is likely to be. There are some cases of diabetes which do very badly indeed; in which telling the patients that they have diabetes is equivalent to telling them that they have a disease which will go on and prove fatal within a moderate length of time. There are other cases of diabetes in which telling the patients that they have diabetes means that they have something from which they will recover, and recover permanently. And then, between these two extremes there are all sorts of gradations. The disease runs very differently indeed in different cases. Why this is we are utterly ignorant. Our ignorance depending, of course, principally upon our ignorance of the real nature of the disease. The symptoms of the disease and its course we are well enough acquainted with, from experience, but what is the real nature of the disease we do not know.

Now, this man is a good example of the cases which do pretty well. His chances are very good indeed. He is likely either to get well or to get so much better that his disease will not do an injury to him. When you have men of about the age that this man is, men who, when they come to you, have already been suffering from the symptoms of diabetes for a number of months, and you find that their general condition is good, as this man's is, that they are well nourished, have a good appetite and feel well, the mere fact of their passing a large amount of water, and of this water containing a good deal of sugar, and the mere fact of their feeling thirsty in addition, does not necessarily indicate the presence of a very grave disease. A very large number of these cases do well, and they do well under a variety of plans of treatment. A certain number of these cases do well simply on the regular diabetic diet—a cutting off from the food all sugars and all starches. Other cases do well on the use of bicarbonate of soda in large doses; others do well on the use of the salicylate of soda; others do well on the sulphide of calcium; others do well on opium and arsenic. These are the cases which do well under a very great variety of plans of treatment; sometimes one plan answers best, sometimes another. In this particular case I should be disposed to use the sulphide of calcium. This drug has the advantage that it can be given in small doses, the bulk of the drug at each dose being quite small, and it answers very well indeed in a certain number of cases of diabetes of this particular kind. You can give the sulphide of calcium either in pill or in solution. It is perhaps as easily administered in the form of pill as any other way, and it may be given at first in doses of a tenth of a grain three times a day, after meals; then you begin gradually to increase it, rising from a tenth of a grain three times a day to a fifth of a grain three times a day, and continue to increase the quantity until your patient shall take three or four grains in the day, which is as high as you will usually have to go.

While the patient is doing this his diet should be restricted, but it is not necessary to restrict it to a very great extent; it is not necessary to put him upon the complete diabetic diet. He should eat meat, a certain number of vegetables and fruits, but he should avoid sugar in every form, and also starch as far as possible, except in the shape of bread. The use or the disuse of wheaten bread by these patients should depend very much upon how well they like Graham or gluten bread. For most people gluten bread is one of the most disgusting things. They not only do not like to take it, but it is very apt indeed to interfere with their appetite for other articles of food, so that you should always be careful about how you insist upon the use of gluten bread. If the patient dislikes it very much, and if it interferes with the appetite for other food, then you can be quite sure that you will do more harm than good by insisting on his taking it. The same is true of the bran bread and of the Graham bread. You will find a certain number of patients who will not be satisfied unless they be allowed to eat some ordinary white bread, and in these patients, even though the bread does contain some starch and the starch contain sugar, yet you will find, taking all together, they will do a great deal better than if you cut off entirely the white bread.

I would advise this man, then, to make his diet on meat, with a moderate amount of fruits and vegetables; to eat no sugar at all in any form; not to eat wheaten flour at all, except in a form and in such quantity as is necessary to make him comfortable, and if he is just as well satisfied with gluten or Graham bread as with white, so much the better. Then to use the sulphide of calcium, continuing it a long time, increasing the amount gradually.

Aortic Stenosis.

CASE 2.—This man, gentlemen, is over fifty years old, and he tells us that for the last year he has suffered from very uncomfortable attacks following exertion; attacks of oppression, of smothering, a feeling as if he would die. These attacks have been much worse lately, so that he has not been able to work.

On examining the heart I find that it is enlarged, that this enlargement is accompanied by a circumscribed apex beat, but the apex beat is not very forcible. The pulsation in the large arteries is more forcible than the pulsation given by the heart itself. On listening over the heart I hear a double murmur at the base of the heart, which is transmitted down the sternum. The man, of course, is suffering from organic heart disease. What is its nature? "Aortic regurgitation and stenosis." Yes, sir; there is undoubtedly a change of the aortic valve, and that change is of the nature of a stenosis and insufficiency, and it is producing a very decided effect upon the general circulation of this man. The effect, so far, seems to be more upon the arterial than upon the venous circulation. His color is fair, he has had no œdema of the feet, he has a little cough with expectoration, but not a great amount, so that the lungs are apparently not much affected, and the effect of the cardiac lesion so far seems to be only upon the functions of the heart itself and upon the condition of the

arteries. There is, I imagine, some dilatation of the large arteries, of the axillary and of the carotid arteries, and I presume also some general diffuse dilatation of the arch of the aorta.

This case will be more benefited by the use of the iodide of potash than by anything else. He should take iodide of potash in ten grain doses three times a day; he should be advised not to exert himself forcibly at anything. It is quite possible that the use of the iodide of potash, if it be kept up some time, may improve the relationship between the tension of the blood in the heart and the tension of the blood in the arteries, and when this is effected the man will be more comfortable than he is now. (The patient was sent out.) But that is a case in which the prognosis is bad; that man is pretty sure to continue to get worse, and I imagine that he will continue to get worse pretty fast now. I should suppose that the lesion of the aortic valve was already a very decided one; that the stenosis was already very marked, and that the probabilities are that the man will continue to get worse much faster than he has already done. The symptoms of disturbance of the venous circulation will probably very soon be added to his other symptoms, and then his condition will be much worse.

Mitral Insufficiency.

CASE 3.—This next patient, gentlemen, a little girl five years old, the mother tells us, had an attack of rheumatism in June, two years ago, which lasted for four weeks. In the following December she had a cough, for which she called in a doctor, and he detected, in his examination, a loud sound over the heart. This sound the mother heard after her attention had been called to it by the physician. It is only on account of this sound, which the mother fears is connected with some serious heart affection, that the child is brought here to day. The mother says she is well, has a good appetite, and is very active, never quiet except when asleep.

On examining the heart it does not seem to be enlarged; the apex is in about its natural position, and the heart is beating very regularly and steadily, and about as forcibly as it ought, but there is a feeling of a thrill communicated to the finger at the impulse of the heart, and the thrill can be felt over most of the præcordial region. I hear a loud systolic murmur, which is transmitted into the arteries of the neck, but which is heard loudest over the apex of the heart. It has that peculiar character which is called musical; it is not the ordinary blowing murmur, but a loud murmur of a musical character, and that is why the mother has heard it, for musical murmurs are always heard more distinctly than other murmurs.

The murmur indicates a lesion in the mitral valve, probably an insufficiency, but it is an insufficiency which does not seem to disturb the general functions of the heart. The heart seems to work just about as well as if the valve were normal. Such cases of organic disease of the heart we meet with from time to time; cases in which there is technically a structural lesion of the valve, and yet the lesion does not seem to interfere with the natural functions of the heart, and that, I think, is the case with this girl. She

is really not very much worse off for having the insufficiency of the mitral valve than if she did not have it, and I do not know that there is any way in which we can improve her condition. Of course, we cannot make the mitral valve sufficient.

Thrombosis of the Axillary.

CASE 4.—This woman, gentlemen, is about forty years old, and she says she was in good health, with the exception of suffering from some bronchitis, up to eight weeks ago. At that time she noticed that the left arm was a little larger than the right arm, and of a little darker color. It continued in this condition, without changing much, for three weeks; then, five weeks ago, the left arm became suddenly very much swollen. When she woke up in the morning she found the left arm a good deal swollen, and not only the left arm, but also the left shoulder. It was of a dark color, and the superficial veins were enlarged. This state of things has continued up to the present time, only that it is not so marked now as it was at first. She also tells us that at the time of this accident, five weeks ago, she suffered from a little pain referred to the upper part of the sternum, and she felt a slight feeling of oppression. On examining her, we find that the lungs are normal, the breathing is good all over both lungs; we find that in front the percussion resonance is normal, and that it is normal behind, with the exception of a little dullness over the left lung. We find nothing wrong with the heart, excepting a not very loud murmur occurring with the first sound at the base.

Now, what is the matter with this woman? "Phlebitis of the axillary vein." When you say phlebitis, what do you mean? "Some inflammation and obstruction of the vein." Do you mean that there has been both inflammation and obstruction? "Yes sir." Well, there has been obstruction, at any rate. I think it would be safe to be satisfied with saying that there is obstruction, and leave out the inflammatory part. I think she has been, and is now, suffering from thrombosis of the axillary vein on the left side. Thrombosis of this particular vein is a very rare condition indeed. Thrombosis of the large veins, without any inflammation of the veins, or other fact in the patient's general condition to account for it, is not a very uncommon condition; we see it most unfrequently, but the veins in which we see it most frequently are the femorals, and in people over fifty it is one of the diseases which you may expect to meet with from time to time—an idiopathic thrombosis of one or both of the femoral veins. It may also occur in the veins of the neck, but it very rarely indeed occurs in the axillary vein.

The prognosis of this condition is usually good; the obstruction in the vein produces symptoms of venous congestion which last for a considerable length of time, and then gradually diminish, getting less and less, until the affected part of the body returns nearly to a natural condition. The most important part of the treatment consists in bandaging, if possible, the part of the body which is the seat of the venous congestion. In this case the arm and the shoulder should be kept steadily bandaged with a flannel bandage all the

time. If the thrombus affect the femoral vein, you should do the same thing with the leg; keep the whole leg and thigh bandaged constantly. There is no particular use in giving medicine unless you happen to believe that the bromide of ammonium has the effect of absorbing blood clots. If you do believe this, then, in addition to the bandaging, you can put the patient upon the use of the bromide of ammonium; but in any case you may be pretty sure that the patient will gradually get better and better, until he returns to a normal, or very nearly normal condition.

Carcinoma of the Oesophagus.

CASE 5.—This man tells us that he is about forty-eight years old, that he belongs to the army, and that his health was good until about six months ago. At that time he was taken suddenly with an attack of vomiting and purging, which only lasted for a short time but which seemed to mark the commencement of his illness. Since that time he has not felt well; he has lost flesh and strength, and his general condition has become depreciated. The only positive symptoms which he complains of are pain and soreness about the thorax and a certain difficulty in swallowing. He has had this pain in a greater or less degree throughout the whole course of his illness; it came on early and has lasted ever since. The pain which he had at first he describes as very severe, and he refers it to the left side of the thorax; the pain which he has now is not so severe; it comes on occasionally, and he refers it to the median line, from which point it radiates to the right side of the chest. Besides this pain he also complains of a feeling as if there were a lump or a ball, which keeps rising into his throat and causes him to attempt to swallow. He also has difficulty in swallowing solid food. He continues to eat solid food, but he swallows it with difficulty, and he feels that he has to take some liquid food afterward to get the solid food down. Then, more recently, he has developed a hoarseness, which you notice in his voice, but he has no cough.

When we make a physical examination we can make out nothing wrong about the heart or lungs, and we find nothing wrong in the abdominal cavity. An oesophageal bougie of moderate size can be passed into the stomach, but it gives rise to a good deal of pain; greater pain than it would cause in a healthy person. Although when you pass a bougie of that size into the stomach of a healthy person, he may very often complain, and perhaps vomit, yet it is evident that this man has suffered an unusual amount of pain, and the pain has lasted afterward. The man looks as if he were somewhat emaciated, but he still has a fair amount of flesh. You cannot say that he is cachectic; his color is very good, and he is still able to take a moderate amount of food. He denies specific history altogether.

Those seem to be all the data we have for a diagnosis in this case. What is the matter with the man? "Carcinoma of the lower portion of the oesophagus." That would be one of the first things to think of. It is possible enough that that may be the disease from which he is suffering; still, it is not a straightforward history of carcinoma of the oesophagus. Could it be any-

thing else? "A mediastinal tumor pressing upon the œsophagus." Yes, I suppose the diagnosis would lie between those two conditions. There is still a third condition which we cannot quite exclude, and that is aneurism of the aorta. I should think the diagnosis lay between those three conditions—aneurism of the aorta, a tumor developed in the mediastinum, and a new growth of the wall of the œsophagus. The man ought to be rather worse than he is now for a carcinoma of the œsophagus existing for six months, for if we took his history as it is given, we would have to believe that the cancer had existed before that time. Of course, the attack of vomiting and purging that he had was to some extent, probably, an accident; it had no real connection with the disease itself. But from that time, six months ago, he has had all the symptoms mentioned; the pain had already begun, and it was a very intense pain, so that you would have to suppose, if it were cancer of the œsophagus, that it had existed longer than six months; seven or eight months. But we would expect that a cancer of seven or eight months' duration would have produced greater effects upon the man's general condition than he shows. He ought to be unable, by this time, to swallow any solid food at all, and he ought already to be fairly cachectic. Then, the pain which he has had is not the sort of pain that we are accustomed to get in cancer of the œsophagus. The pain of cancer of the œsophagus is usually referred to the upper end of the sternum. Sometimes patients have the pain all the time; sometimes it is excited only by swallowing; but they usually refer it to the upper part of the sternum. In this man the pain at first was very severe, and it was referred to the left side of the thorax; but now, when he ought to be having more pain, he is having less pain, and when he swallows it only gives him discomfort. These facts do not accord with the natural history of cancer of the œsophagus. Then we have still another symptom which does not belong to cancer of the œsophagus, unless the cancer be situated pretty high up, and that is hoarseness. His hoarseness, of course, must depend upon one of two causes, either an actual inflammation of the larynx itself, or else an affection of the nerves which supply the larynx. He either must have laryngitis or ulceration of the larynx, or else there must be something affecting the recurrent laryngeal nerve. Therefore, although it is possible that he has cancer of the œsophagus, and although I would by no means exclude that from the diagnosis, yet, if he has, it does not give the ordinary history of cancer; the case is an irregular one. On the other hand, it would be a very irregular history for aneurism of the aorta; but there are some aneurisms, which are given off from the posterior portion of the transverse part of the arch of the aorta, which do behave very queerly indeed. They are so small that they give no physical signs, and the only effects which they produce are pressure effects. These aneurisms are sometimes accompanied by a great deal of pain, they are sometimes accompanied by a difficulty in swallowing, and they are sometimes accompanied by a hoarseness such as we have here. Then, again, a tumor developed

in the mediastinum, pressing upon the œsophagus and upon the recurrent laryngeal nerve, would account for the phenomena that we have here. In fact, his condition and his history would be compatible with either of these three conditions, and yet, it is not a characteristic or straightforward history of either of the three. I do not think we have really the material for making a positive diagnosis. I should be unwilling to say decidedly which of these three conditions the man has. I suppose as a mere matter of probability it would be likely to turn out to be cancer of the œsophagus, although the history is so irregular.

Lead Poisoning—Myelitis.

CASE 6.—You hear this man's history, gentlemen; he is twenty-five years old; a carriage painter by occupation; he has been sick all winter; at first he was very much troubled with cramps in the stomach, and to such an extent that he was sick abed a while. After that his cramps got better, but now he is troubled with pains which he refers especially to the arms and legs. These pains are sometimes apparently in the joints, sometimes they run up and down the arms and legs. There is no difficulty, however, in moving the joints. Besides these pains he has lost flesh and strength. There is now very decided loss of power in both arms. He uses very little force indeed in trying to compress my hand, and there is also decided loss of power in the legs. He has to walk with care. There has not only been a loss of power in the muscles, but there has also been a wasting of them, a certain atrophy of them. Then, again, when I pinch the muscles of the arm or leg they show an unnatural tenderness, and they are unnaturally irritable, and when the skin is exposed there is a disposition of the muscles to contract, simply from the stimulus of the air.

On looking at the man's mouth I find that along the edge of the gums there is a tolerably distinct blue line. That, then, makes the man's history. The fact that he has been a carriage painter by occupation, the existence of a blue line along the gums at the present time, and this history of cramps, pains and loss of muscular power, ought certainly to suggest to you a particular disease. Then, what is the matter with the man? "Lead poisoning." Well, is this a very ordinary history of lead poisoning? If you did not know that he was a carriage painter, and that there was a blue line along the gums, would you think he was suffering from lead poisoning, or what would you think he was suffering from? "Myelitis of the anterior gray cornua of the spinal cord." That would be compatible with the loss of power, with the pain, and with the wasting of the muscles, and that, quite probably, would be the disease from which he was suffering; but there might be an additional part of the spinal cord involved. It would not be exactly a straightforward history; but the symptoms are so well marked that you might well suppose that in addition to the lesion of the anterior gray cornua there was a lesion of the lateral columns of the cord. That would be the diagnosis were there no history of lead poisoning. It would be possible for him to have all of these

symptoms which he has given as a result of chronic lead poisoning, but it would be an uncommon occurrence. The cases of lead poisoning that we get in New York do not usually go on to such a general loss of muscular power of both arms and both legs, and such a wasting of the muscles, as is evident in this man. Still, it is possible to meet with such cases.

There would be no reason why the man should not be suffering at the same time from lead poisoning and myelitis of the anterior horns, and I should think that that is probable in this case; that he has really been suffering from two conditions coming on at the same period of time; that he has been suffering from lead poisoning, and in addition to this, from an attack of myelitis of the anterior gray cornua. The combination of these two conditions would explain his symptoms more perfectly than either of the

two separately. Whether the myelitis could be considered as due to the lead poisoning or not, we could not, of course, say. We practically know nothing about the causation of myelitis of the anterior gray horns, and it is just as probable that such a myelitis may be caused by lead poisoning as that it may not. We have no knowledge one way or the other.

Whatever may be his trouble, he is getting better at the present time, under the use of the iodide of potash, and as long as he continues to improve I think it will be proper to continue that treatment. But he looks as if he would very soon require the use of iron in addition, and if the improvement should not be rapid, I think it would be proper to stop the use of the iodide for a time, and to put him upon the use of sulphuric acid, and after having been on that for a time, he might again return to the iodide.

EDITORIAL DEPARTMENT.

PERISCOPE.

Treatment of the Diarrhoea of Phthisis.

In the *Lancet*, June 18th, 1881, Dr. C. Theodore Williams says, speaking of the peculiar diarrhoea of phthisis, that, arising from ulceration, it requires very careful attention. The great point to be kept in view is the healing of the ulcers, and this can only be attained by shielding them from all irritable substances, and by promoting a healthy granulating action. The treatment, in fact, resolves itself into three sets of measures.

1st. Rest in bed and the administration of only such food as can be quickly and easily assimilated without causing much distention of the intestine, or accumulation of flatus. Such are chicken broth, beef and veal tea, milk gruel, blanc mange, always combined with liquor pancreaticus, and prepared after the admirable methods of Dr. William Roberts of Manchester. Dr. Jagielski recommends koumiss specially in these cases.

2d. Warm applications to the abdomen, in the form of linseed poultices, turpentine stupes, or hot water fomentations, to reduce the pain and promote a certain degree of derivation to the skin. If the pain be severe, I have found the application of a small blister over the area of tenderness on pressure, as recommended by Dr. J. E. Pollock, very advantageous. I have noticed, in some obstinate cases, that when the blister has risen, the diarrhoea has been considerably reduced, and pain existing in the abdomen at the same time has subsided.

3d. Internal medicines. When we have reason to believe that the ulceration is slight and confined to the small intestine, the diarrhoea may be treated by bismuth and opium, or by some astringents. The liquor bismuthi et ammoniæ citratis (B. P.) is a convenient form, but not always so effective as the powdered carbonate or the nitrate of bismuth in ten to twenty grain

doses. Dover's powder combined with it in ten-grain doses is often effective. The most powerful astringent is the sulphate of copper in a quarter to half grain doses, combined with half a grain to a grain of solid opium. Of the various vegetable astringents I have found tannic acid in four-grain doses to answer best, far better than rhatany and catechu, but in all cases I combine it with a certain amount of opium, to reduce the irritability of the ulcers. Indian bael, especially a preparation of the fresh fruit, is often efficacious in checking the diarrhoea if the ulceration be limited. If, however, the ulceration attack the large intestine as well as the small, it is obvious that more local treatment is advisable, and recourse should be had to injections or suppositories. The enema opii (B. P.) administered twice a day is sometimes sufficient, and may be strengthened by the addition of acetate of lead, four grains to an injection, or of tannic acid, five grains. This is a small injection, and it is doubtful how far its local effect reaches. Where the ulceration is very extensive, and involves the greater part of the large intestine, an attempt ought to be made to apply the remedies more thoroughly to the mucous membrane; and for this purpose injections of larger amount—from a pint to a pint and a half—may be used, consisting of gruel or of starch, or, best of all, of linseed tea, and all containing a certain quantity of opium (thirty to forty minims of the tincture). I would specially recommend the linseed tea, as it appears to exercise the same beneficial effect on the ulcers of the large intestine as it does in follicular ulceration of the throat. One of the most obstinate cases of intestinal tubercular ulceration I ever witnessed yielded to linseed tea injections, after almost every other treatment had been vainly tried, the ulcers apparently healing, the diarrhoea ceasing, and the patient living for two years afterward, and dying of pulmonary lesions. In cases where the stools are very fetid, I have added glycerine of carbolic acid to the injection

with advantage. In many cases, however, it is desirable to give the large intestine as much rest as possible, and not to stretch the ulcerated mucous membrane through any distention by fluids: in these cases suppositories of morphia (from half a grain to a grain), or of the compound lead one, or of those of tannic acid, are indicated, and the treatment of the diarrhoea arising from lardaceous degeneration of the intestine is not very hopeful. Where the very channels of assimilation—viz: the villi—have undergone degeneration, as well as the various structures from which the succus entericus is poured out, it is difficult to see how treatment can restore the lost tissues. Dr. Dickinson's researches show that the loss of alkali is the chief characteristic of the disease. Dr. Marcet's analyses show that the chief chemical feature is deficiency of phosphoric acid and potash, and excess of soda and chlorine, and on this principle we should give phosphate of potash. When, however, the disease has so far advanced as to reach the intestine, it may be considered beyond any effective general treatment. We must be content to restrain the diarrhoea if we can, by astringents, the more powerful the better. Tannic acid in from two to four-grain doses, with dilute sulphuric acid, sulphate of copper or sulphate of zinc are the most useful, and injections of these substances do some good.

Action of Coffee and Sugar on the Stomach.

In a paper presented to the Société de Biologie (*Rev. Méd.*, May 14), M. Leven states that coffee, so far, as is often supposed, from accelerating the digestive process of the stomach, rather tends to impede this. When thirty grams of coffee, diluted in 150 of water, is given to a dog, which is killed five hours and a half afterward, the stomach is found pale, its mucous surface being anæmic, and the vessels of its external membrane contracted. The whole organ exhibits a marked appearance of anæmia. Coffee thus determining anæmia of the mucous membrane, preventing rather than favoring vascular congestion, and opposing rather than facilitating the secretion of gastric juice, how comes it that the sense of comfort is procured for so many people who are accustomed to take coffee after a meal? A repast, in fact, produces, in those whose digestion is torpid, a heaviness of the intellectual faculties and embarrassment of the power of thinking; and these effects, and the disturbance of the head, are promptly dissipated by the stimulant effect which the coffee produces on the nervous centres, as shown by experiments with caffeine. Coffee and tea, when taken in excess, are a frequent cause of dyspepsia, for the anæmic condition of the mucous membrane being periodically renewed, a permanent state of congestion is at last produced, which constitutes dyspepsia. Sugar, which with many doctors has a bad reputation, is an excellent aliment which assists digestion, and should not be proscribed in dyspepsia. By experiment, digestion of meat is found to take place much more completely when sugar is added. Coffee exerts both a local and general action, operating locally by means of its tannin, by diminishing the calibre of the vessels, but acting on the gen-

eral economy by exciting the nervous centres and the muscular system. It renders digestion slower, and is only of good effect by relieving the feeling of torpor after meals. Its injurious action on digestion may be corrected by adding sugar so as to counterbalance its effects on the mucous membrane. This adding sugar to coffee is not only a pleasant practice, but one contributing to digestion.

Treatment of Acute Metritis.

In the course of an article in the *Virginia Medical Monthly*, January, 1884, Dr. Joseph Warren writes:—

When metritis becomes complicated, it may involve the ovaries and broad ligaments, and become pelvic peritonitis, perimetritic phlegmonous lymphangitis, phlegmasia dolens. These all may arise from a cold, from suppressed menstruation, tumors, cancerous and tuberculous affections, and from sudden shocks to the nervous system by sea-bathing, accidents, railroad injuries, etc. In the treatment of acute metritis, we should pursue the most mild antiphlogistic method in the early stages. Disinfectants, such as a solution of chloride of zinc, one part to thirty of warm water, or carbolic acid, ten to thirty per cent. in glycerine, with one or two grains of sulphate of morphia to each quart of water, are called for in all puerperal diseases, and wherever septic poisons are introduced. Flaxseed tea will also be found very useful and soothing. Spongiopilin, wet in hot water, having half a drachm or more of the fluid extract of belladonna to enough hot water to thoroughly wet it, to which tinctura opii may be added, if the pain is very acute and distressing, may be applied to the abdomen with benefit. A dozen leeches, or more, applied just above the pubes, will often give great relief. A suppository of belladonna, hydrated chloral, morphine made with cocoa butter, may be inserted after each injection of the above named mixture. This, with rest in bed, and the administration of the following internal remedies, will generally be found very efficacious in relieving the first acute and engorged state of acute metritis:—

R.	Chloral hydrat.,	3 iij
	Chloral croton,	gr. xxx
	Liq. opii comp.,	3 vj
	Glycerine,	3 ij
	Syr. tolu,	3 j. M.

Sig.—A teaspoonful every hour until ease from pain and sleep be induced.

If vomiting occurs, which is almost always an accompaniment, I would add to the above mixture, in place of the croton chloral, bromide of potassium, and a solution of sulphate of morphia for the liquor opii compositus. Should the patient reject everything by the stomach, I would throw up into the rectum an enema of starch-water and a drachm of tincture of opium. This, with the exclusion of all noise and excitement, will be, in accordance with my experience, the best treatment for the first twenty-four or forty-eight hours. After this, if the stomach will tolerate it, I would give opium and hydrargyri chloridum mite—half grain of opium and two of calomel—once in four or five hours. I would

follow this, after one day, with bisulphate of quinia, in two to five grain doses. If the patient will not bear opium, I would give extract of hyoscyamus—hyoscyamus and camphor, with or without the chloral. Bromide of ammonium, ten grains to the drachm, in hot water, is also very useful in these cases.

Treatment of Dysmenorrhœa.

Dr. G. W. Moss, of Paris, Mo., gives the following treatment of Dysmenorrhœa in the *St. Louis Courier of Medicine and Collateral Sciences*, for June, 1881:—

If called upon to prescribe for a patient in the midst of her suffering, if the menstrual flow has not begun, or is scant in quantity, I usually direct warm stimulating drinks, such as ginger, spice, or clove tea, the warm foot or hip bath. If the extremities are cold, with chilly sensations over the body, the patient is to be put to bed with hot bricks or bottles of hot water to the feet and about the loins. If the bowels are constipated, give purgatives, usually calomel and rhubarb, or the compound cathartic pills. If the patient is plethoric, with flushed face and some excitement in the circulation, saline cathartics are preferable.

If the flow is still tardy or scant, assist the purgatives with copious injections of warm water. These failing to bring relief, I give compound spirits of ether, tincture hyoscyamus, spirits of camphor, each a half to one drachm, to be repeated, if necessary, until the flow becomes free enough. If the pain still continues, or is of a spasmodic character, the pulse rather weak, I find nothing better than ten to fifteen drops of aromatic spirits of ammonia, at the same time using as an injection into the rectum—

R. Chloral hydrate,	grs. xx-xl	
Bromide potassium,	grs. xl-lx	
Tincture belladonna,	gtt. xx	
Water,	℥ ij-iv.	M.

And to this I frequently add tincture of assafoetida, or 30 to 40 drops of tincture of opium instead of the belladonna; and this prescription I have scarcely ever known to fail to give relief and rest to the patient.

Sometimes I use the hypodermic injection of morphia, but I am not partial to this mode of medication. If the patient is anæmic, and the pains of a neuralgic character, I have frequently found ten grains sulphate quinine, with one-fourth to one-third grain morphia, repeated two or three times, if necessary, to give more prompt relief, and to be more permanent in its effects than any other remedies. Vaginal injections of warm water, sometimes with the addition of laudanum and belladonna, are soothing and grateful to the patient.

This outline of treatment, varied, of course, to meet particular symptoms and individual peculiarities, I regard as applicable to all the forms of dysmenorrhœa during the period of the menstrual flow.

During the intermenstrual period the treatment is directed with reference to the general condition of the patient. If she is anæmic or neuralgic, iron, with other tonics, is given, a

favorite prescription, in the beginning, being the well known compound of blue mass, iron and quinine, with the view of equalizing the circulation, regulating the bowels and restoring secretions. Afterwards quinine, iron and strychnia, or nux vomica, warm baths, with friction to the skin frequently, flannel next the skin, and plenty of exercise in the open air, and this last not the least in my estimation.

In the plethoric the blood is as much at fault as in the anæmic, and for the purpose of reducing that fullness of habit, counteracting the tendency to local congestions and correcting the morbid condition of the blood, I know of no better treatment than an alterative course of mercury, followed by saline purgatives, with warm baths, frictions, open air exercise and plain diet. If the patient is of a rheumatic or gouty diathesis, I have found no remedy superior to that of Dr. Dewees, fifty years ago, or more, and that is colchicum and guaiacum.

The prescription of Dr. Fenner, of New Orleans, in nearly all dysmenorrhœal cases, and one that I have frequently used myself with good results, is—

R. Gum guaiacum,	℥ iv	
Canada balsam,	℥ iv	
Oil sassafras,	℥ j	
Hydrarg. chlorid. cor.,	gr. x	
Rectified spirit,	℥ iv.	M.

Of this is to be given ten or thirty drops, night and morning, commencing a day or two before the flow is freely established.

The Therapeutical Indications of Bromide of Ammonium.

Dr. E. Halsey Wood, of Hersey, Mich., in a communication to the *Michigan Medical News*, April 25th, 1881, first draws attention to the fact that most authorities, when referring to the bromides, are thinking only of the potassium salt, and regard the effect of the different bromides as analogous. After showing this to be an error, he says:—

The following are the symptoms which I have found to indicate the use of the bromide of ammonium: Frontal headache, suffusion and blurring of the eyes (asthenopia), soreness of the upper lids, ptosis or convulsive closure of the eyes due to paresis of levatores palpebrarum, a sense of swollenness or bulging in the eyes (exophthalmos), a wavering dilatation of the pupil, injected and icteroid conjunctivæ, excessive sweating, sleeplessness, disagreeable dreams (phantasmagoria), anorexia, nausea, vomiting and retching, stiffness of fingers, numbness, swollenness, and sweating of hands, blue or other abnormal color under nails, capillary congestion of hands, pain in nape of neck running up into the occiput, pain in shoulders, elbows, and knees, pain at sacro-spinal junction (lame back), a sense of weariness (muscular debility) or pain, or pain with spasm (cramps) in the calves of legs, pain between shoulders and under scapulae, any degree of coolness of hands or feet appreciable by the normal sense of caloric, œdema of feet and ankles, congestive, intestinal, uterine, renal, gastric, and pulmonic hemor-

rhages, despondency and irascibility, lassitude, languor, listlessness or weariness, hyperthermy and hypothermy, hot flushes and cold chills, hopelessness (acute formapathy), drowsiness in the daytime, atonic voice, tinnitus aurium due to congestion of the labyrinth, pulse slow or thready, a sense of chilliness, and a sense of constriction around the chest.

In the same journal, May 10th, he relates several cases illustrative of its value in the treatment of cholera. He employs it in full doses frequently repeated (adults gr. xx, every five minutes), according to the urgency of the case. As to the *modus operandi*, he says:—

The remedy acts as a sthenic; it energizes the ganglia and restores innervation, and all the evidences of deranged function disappear under its influence. It is as specific in the mild as it is in the severe degree of gangliasthenia, and thus not only exhibits its potency but proves that the shape of disease assumed is due to different degrees of the same condition.

Inoculation of both Eyes, for Pannus.

The following case is reported in the *New York Medical Record*, July 2, 1881, by E. S. Peck, M.D., from notes furnished by Dr. Sturs:

John Smith, aged twenty-one years, single, born in the United States, worker in varnish, entered the eye ward of Charity Hospital, Blackwell's Island, October 18, 1880.

History.—Patient came to hospital suffering from trachomatous pannus in both eyes; duration in the right eye four years, in the left eleven years. He attributes this trouble to use of dirty towels at an orphan asylum in which he passed a portion of his boyhood. On admission, patient could merely make his way around the ward; sight of right eye was better than that of left. Patient was ordered to bed, with constant application of hot compresses night and day; also a solution of nitrate of silver, gr. xx, ad aq. \bar{z} j. twice daily to the inner lid surfaces and cornea.

November 30th. Condition improved as to pain, tumefaction, and infiltration of lids, but no improvement in vision.

December 4th. Treatment by inoculation was resorted to. First experiment: Pus was taken from a long suppurating wound behind the ear; wound secretes healthy pus; was made by Dr. Peck for the purpose of connecting two post-aural sinuses situated one above the other, four and one-half inches. This pus was rubbed over the cornea of the right eye.

December 7th. No evidences of any acute inflammatory reaction were present. Second experiment: On the same day pus was taken from the eye of an adult in Ward 7, female, ophthalmic division, suffering with purulent ophthalmia. Pus was injected by means of a hypodermic syringe beneath the conjunctiva of lower right lid. Owing to the movements of the patient, injection was not as successful as could be desired.

December 10th. No signs of inflammation. Third experiment: Matter was now taken from a recent case of ophthalmia neonatorum, in Ward 7, female, and rubbed across the cornea of the right eye.

December 14th. No signs of inflammatory reaction; and, as a fourth experiment, it was determined to use gonorrhoeal pus. A fresh case, of seven days' discharge, was found in one of the male venereal wards. Two drops were applied by means of the finger to the cornea and conjunctiva of the right eye. Orders were given to let it entirely alone, and not to protect the left eye.

December 15th. Within ten hours after the attempt at inoculation the right eye showed all the signs of an acute ophthalmia. No dressings were ordered, and the disease was left to run its course.

December 16th. On this, the following day, the left eye developed the same characters of inflammation.

December 25th. Copious discharge of a creamy, yellow pus from both eyes. Patient complains of considerable pain under the lids.

January 4th, 1881. Ordered a solution of nitrate of silver, gr. x, ad aq. \bar{z} j, three days of the week, and the same solution, gr. v, ad aq. \bar{z} j, four days of the week, with constant application of iced cloths.

Patient was discharged from the hospital at his own request in March, and visited me at the Northwestern Dispensary, April 10th, when a careful examination gave him, for vision, as follows: Right eye, four years blind and inoculated, V — finger-counting at nine feet; left eye, eleven years blind, inoculated by infection, V — fingers at one and a half feet.

Patient has engaged himself at a livery stable, as hostler, and states that his sight for this purpose is sufficient, and that he suffers no pain nor tenderness. In the right eye the iris and pupil are plainly to be seen.

Crysophanic Acid in the Treatment of Chromophytosis.

Dr. W. B. Craig, of St. Joseph, Mo., says, in the *St. Louis Medical and Surgical Journal* for July, 1881:—

Chromophytosis is due to the presence of a vegetable parasite or fungus, occupying the outer layers of epidermic cells, and with respect to its local parasitic origin, resembles trycophytosis and favus.

It is, therefore, contagious, though not in as marked a degree as other allied affections. Its site of election is the trunk and upper extremity. Occasionally it is seen upon the neck, thigh and groin. The breast and back are the usual locations. It is nearly always symmetrical in its development, commencing as small, pin-head-sized, yellowish, scaly spots at the centre of the sternum, and gradually spreads bilaterally until the entire chest is invaded. Often these coalesce, and, as in this instance, the back was completely bronzed, so great was the discoloration. These disks gradually enlarge, retaining their circular form, and are slightly elevated, excepting the diffused patches.

Itching is a symptom present to a limited extent, but it cannot be very severe, as patients are seen who seldom recognize its presence, their attention often being attracted by a physician, who is searching, it may be, for something else:

or the patient imagines he has contracted syphilis, and when interrogated as regards eruption, shows up an old chromophytosis. It occurs in early life, seldom being met with in old age. Is chronic and liable to relapse unless every patch is removed with the outer layers of integument.

The following case is that of a young man, 21 or 23 years of age, otherwise healthy and robust. He contracted the disease at school seven years ago, and has been treated almost continuously since; for the last six months particularly.

When visited by the patient and his body examined I gave rather an unfavorable prognosis, on account of the extent of integument involved and the chronicity of the malady.

However, we resorted to the corrosive sublimate lotion for a few days, followed by the following, which we ordered rubbed in thoroughly every night:—

R. Acidi chrysophanici, \bar{z} j
Vaseline, \bar{z} j. M.
Ft. ung.

After using this for several days the body became acutely sensitive, as predicted by me; in fact, this is the only objection to this acid. It was again used after the irritation subsided, followed twice a week by a Turkish bath, in which *sapo viridis* was substituted for the other soap.

Two weeks from date of commencement of treatment the entire trunk was as white and healthy as the normal skin. I then ordered the following lotion as a precaution against relapse:—

R. Sodii hyposulph, \bar{z} ij
Aq. rosæ, f. \bar{z} vj. M.
Ft. lot.

Sig.—Bathe with this frequently.

Treatment of Scarlatina and Measles.

The following treatment is recommended by Q. C. Smith, M.D., of Austin, Texas, in the *Nashville Jour. of Med. and Surg.*, June, 1881:—

Reduce the temperature by tepid ammoniated baths—a tablespoonful of strong aq. ammonia to each gallon of water—repeated as often as necessary to keep the temperature quite normal. Patient should remain in the bath five to fifteen minutes, being well rubbed during the time. Just before being removed from the bath one or two gallons—according to the intensity of the fever—of drinking-cold water is poured over the patient's head in a full stream, the patient quickly removed from the bath and wrapped in a dry blanket, and allowed to rest quietly twenty or thirty minutes. Then, without removing the coverings, the patient is gently but thoroughly embrocated over its whole person with camphorated vaseline, repeating the embrocation after each bath. Should the case be so mild that bathing is not deemed necessary, the camphorated vaseline embrocation is repeated three or four times a day. For internal medication, we generally use something like the following:—

R. Carb. ammonia,
Bromide lithium, $\bar{a}\bar{a}$ \bar{z} ss
Liq. acetate ammonia, q.s. \bar{z} j. M.
Ft. sol.

Sig.—Teaspoonful, in little sweet water, every one to three hours.

For the throat trouble, put a few grains of pure, dry bisulphite of soda in the patient's mouth every few minutes; let it slowly dissolve and soak down the throat.

If this part of the treatment is unremittingly attended to during all the waking hours of the patient, the ear, laryngeal and bronchial sequelæ that so often attend these diseases will rarely if ever occur.

When patients are too large to handle in a bathing tub, we substitute the sponge bath, repeating often as necessary to keep the temperature quite normal. If this line of treatment is begun early in the attack, and faithfully followed out, little or nothing more will be needed, and recovery will usually be rapid and complete. We formerly applied the above mentioned treatment to scarlatina only, and by a blunder in diagnosis—we do make blunders sometimes—found ourself applying it to a full fledged case of measles, and the case did so well that we said nothing about the blunder—doctors usually don't—but adopted this as our usual treatment for measles. We give our patients all the cold water, lemonade, milk (sweet or sour), and fruits (raw or cooked), in small quantities at a time, that they want, plenty of fresh air, without draughts. We do not claim originality for this plan of treatment of scarlatina and measles, but can most confidently assure our fellow laborers that it has proved itself eminently satisfactory in our hands.

REVIEWS AND BOOK NOTICES.

BOOK NOTICES.

On the Mont Dore Cure, and the Proper Way to Use It. By Horace Dbell, M.D., etc. London: J. & A. Churchill, 1881.

The Mont Dore or Mont d'Or is a famous watering place in Auvergne, France, patronized by invalids ever since the Roman Conquest of Gaul. The chemical composition of the waters include the salts of soda, magnesia and lime, and a minute quantity of arseniate of soda. Much of the success of the treatment consists in the details of the use of the waters. These have been reduced to a system more elaborate than that of a Turkish bath, including spraying, douching, aspiration, toweling, packing, etc., etc. The consequence of such thorough work, backed by regular and close medical supervision, is that a remarkably favorable record has been shown of the effects on rheumatic, gouty, serofulous and tuberculous patients, and also in cases of asthma, bronchitis, catarrh, the early stage of phthisis and other affections of the throat, chest, and mucous membranes.

Believing that the system elaborated at Mont Dore could be successfully carried out at other localities, an establishment for the purpose has been formed at Bournemouth, England, and it

is with especial reference to this fact that Dr. Dobell has prepared this volume, describing the method in detail, explaining in what conditions it is most useful, and analyzing its beneficial results. As he is one of the leading authorities on such subjects in Great Britain, it will undoubtedly exert a permanent influence in that country, and we recommend his volume to all who would make a study of balneology in this land also.

A New Form of Nervous Disease, together with an essay on Erythroxyton Coca. By W. S. Searle, A.M., M.D., Fellow of the Medico-chirurgical Society of New York. New York: Fords, Howard & Hulbert, 1881. Cloth, 12mo, pp. 138.

The author of this work gives a very elaborate description of a peculiar form of nervous disease, many cases of which he has met with during the past seven years. Several other physicians, he states, have also met with similar cases. The disease is characterized by two principal phenomena, a sensation of a sudden *shock*, or *blow*, or *explosion* in some part of the head, the other a condition of passive congestion, usually of the cerebellum only, both sometimes extending on the one side to the cerebrum and on the other to the upper portion of the spinal cord. It may be distinguished from epilepsy by the absence of spasm of any kind, by the fact that consciousness is seldom lost, and the intermediate symptoms being constant and severe, with no intellectual disturbance, vertigo very common and violent, and other distinguishing characteristics which he clearly points out. He regards the disease as always amenable to treatment and proper hygiene. The doctor, being a disciple of Hahnemann, believes in specific medication by homœopathic remedies. He, however, describes what he called the antipathic treatment of this disease, chief among the remedies of which are bromides, belladonna, nitrate of silver, ergot, strychnia and hamamelis. Coca he regards as one of the most reliable remedies, and in the second part of his book he gives a very full description of this plant and its effect on man.

Habitual Mouth-Breathing, its Causes, Effects and Treatment. By Clinton Wagner, M.D., Professor of Diseases of the Throat, University of Vermont, etc. etc. New York: G. P. Putnam's Sons, 27 and 29 West 23d street. 1881. Cloth. Small 8vo. pp. 52. Price 75 cents.

This little book, which has been elaborated from a paper read before the New York County Medical Society, April 25th, 1881, treats of a

subject of great importance, but which, nevertheless, has been heretofore much neglected by medical writers. The author shows how the lower animals and savage tribes of man invariably breathe through their noses, and points out that the latter are usually free from catarrhal diseases of the air passages; he shows, and fully explains the effects of habitual mouth breathing, illustrating these by three cuts, taken from nature, and which speak eloquently against the practice. He finally lays down a plain treatment for such cases, where either foreign growths or some other abnormal condition of the air passages interfere with natural respiration. We heartily recommend this little book to the profession, and the first part of it, that related to the injurious effects of this practice, should be reprinted and distributed as a sanitary tract among the laity.

A Practical Treatise on Impotence, Sterility and Allied Disorders of the Male Sexual Organs. By Samuel W. Gross, A.M., M.D., Lecturer on Venereal and Genito Urinary Diseases in the Jefferson Medical College of Philadelphia, etc., etc. With sixteen illustrations. Philadelphia: Henry C. Lea's Son & Co., 1881. Cloth, 8vo., pp. 174.

The author recognizes four varieties of impotence, viz.: Atonic, psychical, symptomatic and organic. The first variety is, in the majority of cases, caused by masturbation or sexual excesses, and is frequently associated with stricture of the urethra. The prognosis is usually favorable, except in extreme cases, in which both desire and erection are abolished, and the patient is, in addition, suffering from hypochondrism. The treatment should be both local and general, and should have for its object to remove the cause. The second variety is extremely rare and usually amenable to moral treatment. The third variety is usually produced by the long-continued use of cerebral sedatives, by the prolonged exposure to certain poisonous vapors, as arsenic, lead, etc., or by injury to the brain and spinal cord. Removal of the cause, and the administration of tonics will usually cure the disease. The fourth variety depends on some abnormal condition or malformation of the penis, testes or adjacent parts, and the treatment instituted must be with a view to correcting the same. The causes and treatment of sterility, spermatorrhœa and prostaticorrhœa are fully discussed, and numerous cases recorded. The work is in every respect original, and is based on clinical facts, as practical works on medicine and surgery should be.

THE
Medical and Surgical Reporter,

A WEEKLY JOURNAL,

Issued every Saturday.

D. G. BRINTON, M.D., EDITOR.

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115 South Seventh Street,

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THEORIES OF THE CAUSATION OF EPIDEMICS.

The opinion has been expressed by several medical writers, and has passed into the public press, that the world is about to enter a period of years in which epidemic diseases will be unusually frequent and virulent. The grounds of these predictions are not identical, some being the periodic return of certain "epidemic cycles," others the position of the planetary bodies, etc. It is hardly worth while to dispute seriously these statements. Science certainly does not at present permit us to make any such predictions. But it may be well to consider what knowledge we actually have of the nature of epidemics and the laws of their extension.

History seems to show, beyond doubt, that there are epidemic cycles; that certain periods are broadly discriminated in medical history by the wide prevalence of diseases of this class. This was fully recognized as far back as the age of SYDENHAM, who attributed them to certain unknown changes which take place in the

bowels of the earth—*pro varia scilicet ejusdem ætate ac duratione.*

Somewhat more distinctly, the epidemiologists of a century later divided the "epidemic influence" into the *cosmical* and the *telluric* agencies, which we may also express as those relating to the *atmosphere* and the *soil*, a division borrowed apparently from Hippocrates. Carrying these upward to higher generalizations, the learned HÆSER, in his *Geschichte der Volkskrankheiten* (published in 1839), predicted that the time would come when, to explain the prevalence of these great pestilential periods, men of science would find them more or less in relation to the position of the earth with reference to the plane of the ecliptic, the progression of the magnetic meridians, the alterations in the temperature and moisture of the earth's surface, the geological changes of water and land, and perhaps even the progress of the solar system through space.

Mindful, however, of the sage warning of GÖTTE, that he who would rise to the clouds loses his firm foothold on the earth, modern students have left to one side these remote (though not valueless) considerations, in order to fix their eyes on man himself. They have taken as their maxim the observation of the celebrated HUFELAND, as profound as it is beautifully expressed: "As every individual, so has the life of man as a race its aim and purpose, its growth, periods, fruits and changes, all developed out of itself. And thus the first and chief cause of the alterations which the race undergoes is to be found in *man himself*, in the life of mankind in time, and in that self-development inseparably bound to this life, known as *culture*." (*Geschichte der Gesundheit*, 1813).

By studying the causes of disease in the individual, and what is of equal importance, the requisites to health under the varying conditions of life, we are gaining a position whence we can carry on a successful defence against some of the most dreadful pestilences of past ages. We have learned that cleanliness, wholesome and sufficient food, drainage, antisepsis and courage, can keep at bay the plague, cholera, and other formidable foes; and there is every reason to say that had

these measures been known and practiced in past centuries, history would not have such terrible desolations to record as are now spread upon her pages.

While this is true, no one will deny that certain seasons do develop, much more than others, a tendency to epidemics. A recent English writer, Dr. GUY, justly observes that, for that matter, every year has some atmospheric element which neither thermometer, rain or wind gauge, nor measure of moisture, nor test of ozone can reveal to us, but only our records of sickness and death. One year it is such as favors smallpox, the next, perhaps, it will promote scarlet fever, or measles, or whooping cough, or it will, so to speak, select from several forms of fever that one which shall fill the beds of our hospitals. This condition of air, of which disease itself is the only test and measure, was once called pestilence, but is now known as its "epidemic constitution. And this, whenever it acts on the population with such energy that the disease which it favors affects large numbers of persons, that disease is calculated an epidemic. But this epidemic constitution, be it observed, is not its true and direct cause, but only its pre-disposed cause."

Another epidemiologist, Dr. Parkin, holds that there occur certain "pestilential epochs," during which the world is at frequent intervals devastated by epidemics, which travel in a determinate direction, from central or eastern Asia to the west of Europe, and even to America; that during such epochs all diseases, even such as are not considered communicable from one person to another, increase in frequency and in violence; that these epochs are, moreover, marked by epizootics and by blights, or diseases in the vegetable kingdom. Such an epoch is generally ushered in by the appearance of new diseases, or re-appearance of maladies that had become obsolete. He believes that the pestilential epoch is characterized also by mental diseases, and by delusions; also that we have entered upon a new period of epidemics, as instanced by the recurrence of smallpox, diphtheria, typhoid, carbuncle, typhus, scarlet fever, diarrhœa, the increase

of epizootics, and the various maladies among fruits and vegetables.

These opinions are not in conflict with that of HUFELAND, above given. Man is, in a measure, the servant of the conditions which surround him; but he is not their slave; he must obey them until he understands them; then it is his turn to become the master; then he dominates them by the divine right of rule of intelligence over material force. So it will be with the "pestilence that slayeth at noonday;" by studying it he will come to know it; by knowing it, to control it.

NOTES AND COMMENTS.

Therapeutic Notes.

SUGAR OF MILK AS A LAXATIVE.

A writer in the *Deutsche Med. Wochenschrift* recommends sugar of milk as an efficient and agreeable laxative. He gives from a quarter to half an ounce in half a pint of warm water, or of milk and water, fasting, in the morning.

HOW TO GIVE TANNIN.

This useful astringent often yields unsatisfactory results when administered in powder or simple solution, either failing of effect or producing pain and other signs of irritation of the stomach or intestines. We note in a German exchange, that at the Leipzig Policlinik all these unpleasant results are avoided, and a very useful and agreeable astringent mixture, well suited to children, is prepared by forming an albuminate of tannin, according to the following formula:—

R. Acidi tannici, 2 parts
Aque, 100 parts.
Sol. album. ovi. un., aa 100 parts.

The last mentioned is to be added with stirring briskly.

PAPAIN FOR TENIA.

In the *Lyon Médical* M. Bouchut reports that he has used papain, or vegetable trypsin, as well as animal pepsin, as a vermifuge, and he states that he not only finds it more active, but that he has relieved several children by its means. After its use a child had passed yellow softened segments of tapeworm, twenty five centimetres long, and in a partially digested state. These facts, taken with those which have been derived from the colonies in which the juice of carica papaya has been successfully used for worms, go far to prove that this new remedy will in future be of service as an anthelmintic.

NOTES ON IODOFORM.

The use of iodoform internally is nothing new in this country, as any one can see by consulting the MEDICAL AND SURGICAL REPORTER for Jan. 15th, 1870, and other numbers. But in Europe it does not seem to have been much exhibited. Sigmund speaks of it as a useful narcotic in syphilitic pains. He gave it up to half a drachm in the twenty-four hours. Windelschmidt, in the *Allg. Med. Cent. Zeitung*, June 1st, tried it successfully in convulsions of infants. His formulæ were:—

R.	Iodoformi,	gr. ij-vij	
	Pot. iodidi,	ʒj	
	Vini Tokayi,	ʒij.	M.

Dose.—Three to fifteen drops, three times a day.

Or,

R.	Iodoformi,	gr. vij	
	Eth. sulph.,	q. s.	
	Vini Tokayi,	ʒij.	M.

Dose.—Five to ten drops, three times a day.

A woman suffering for two months from severe sciatica, of syphilitic origin, was readily relieved by a grain to a grain and a half, three times a day.

Prof. Simon, of Breslau, employs it extensively in skin diseases. Used locally, its peculiar power is to *excite healthy granulations*. Hence it is especially indicated in old ulcers, fistulæ, obstinate buboes, etc. Its odor is best concealed by balsam of Peru, or oleum melissæ, three parts to one of iodoform. An excellent combination is one part of iodoform to fifteen of collodion. This makes a firm iodoformized coating over soft ulcers, etc., preventing their spreading.

Large Calculus—Supra-Pubic Operation.

An interesting case is recorded among the reports of the Société Anatomique (*Progrès Med.*, April 16).

A patient 61 years of age entered the service of M. Guyon; for six years he had suffered from urinary troubles; he had pain in the region of the bladder almost constant, but augmented by walking or riding; for the last two years he has had, in addition to the pain, an almost constant desire to pass water.

Examination with the catheter was difficult; bleeding from the urethra was induced; the bladder bore little manipulation, but it was made certain that the organ contained a very voluminous calculus: this was confirmed by rectal exploration, which revealed a hard, smooth tumor situated behind the prostate.

A second examination, a few days later, confirmed the first, and the volume of the stone was

found to be so considerable that it was determined to remove it by the high operation.

A large silver catheter, grooved on the concave surface, was introduced into the bladder, and about two ounces of liquid injected; a vertical incision about four inches in length was made in the median line, commencing at the superior border of the pubis. Layer after layer was incised, an aid holding up with the finger the peritoneal cul de-sac and intestine at the superior angle of the wound.

It was found impossible to make the end of the catheter appear at the wound, and the bladder was incised directly over the calculus, which filled the organ almost completely; it was removed with forceps after considerable difficulty, the bladder being slightly torn at the inferior angle of the wound. Deep and superficial sutures were passed, a space of three centimetres being left at the inferior angle of the wound, to allow of the free passage of pus, etc.; a rubber catheter was placed in the bladder, the external end passing out at the inferior angle of the wound.

The calculus was enormous, nine centimetres (three and three-fifths inches) in length by seven centimetres in width and five in thickness; it weighed three hundred and forty-six grams (eleven and a-half ounces).

The day following there was slight fever, with but little discharge from the wound, but the next day the fever was higher and the discharges of a dark color. The succeeding days the general condition became worse; the urine was dark colored; there was intense urethritis; the temperature mounted to 104°, and the patient succumbed on the sixth day.

Extra-Uterine Pregnancy—Removal of Decomposing Fœtus Through Umbilicus.

The *Obstetric Gazette* for June, 1881, states that at the meeting of the Baltimore Academy of Medicine, session 1880-81, Dr. Erich exhibited a specimen of a decomposing female fœtus of about nine months' development, with the following history: "In February, 1880, the patient noticed that she was getting 'a lump in her stomach.' Toward the latter part of the following spring she quickened. She continued to grow larger until August; then the swelling began to diminish, and violent, cramp-like pains, with symptoms of peritonitis, appeared. In October pus began to discharge through the umbilicus. When, two days previous, the patient came under the Doctor's care, she emitted a most offensive odor. The head of one femur projected

from the umbilicus, and on the day of the report the entire fetal remains were removed. No cutting was done and as little interference with the sac as possible was practiced, for fear of making an opening through some other part of the sac, weakened by the degenerative process. A portion of the scalp was found attached to the cyst wall and was removed. The parietal and frontal bones were found lying loose in the cyst. Evidently the fetus had reached term early in August; the liquor amnii had then been absorbed, and in consequence of this peritonitis had been set up. There was no sign of the placenta, which probably was absorbed. The after-treatment consisted in filling the cyst with carbolized cotton, so as to cause it to heal from the bottom, and cause all the decomposing matter to be thrown off. The patient was doing well.

Subcutaneous Injection of Ergotine in the Treatment of Enlarged Spleen.

Dr. W. L. Barret, of Covington, Tenn., reports, in the *Southern Practitioner* for June, 1881, the case of a girl who had suffered for some time from malarial fever, first of an intermittent and later of a remittent type. The spleen was greatly enlarged. He injected ergotine, four grains in solution, beneath the skin, immediately over the spleen. Three days after he visited her, intending to repeat the injection, but to his surprise found that the spleen had resumed almost its normal size.

He writes that she is now well and suffers no more from that troublesome condition—an enlarged spleen.

He further states that his friend, Dr. T. W. Roane, has also used it with excellent results in a number of cases of enlarged spleen and liver, the result of malaria.

CORRESPONDENCE.

Pathology of Tuberculosis.

ED. MED. AND SURG. REPORTER:—

I must apologize for not sooner replying to the inquiry from Dr. O'Neal, in your issue of March 5th, but it escaped my attention, and I do so now.

If Dr. O'Neal had perused the full work by Dr. Salisbury, on the Causes and Cure of Consumption, based on an experience of over 1000 cases, corroborated by myself, as follows:—

I. Fasciculus. "On a New Physical Sign of the Pre-tubercular Stage;"

II. Fasciculus. "The Morphology of the Consumptive Blood;"

III. Fasciculus. "Treatment of Consumption on the Salisbury Plan;" he would not probably have asked the question. (I may as well state

that this entire work awaits publication, and is ready when called for by subscription.) Of course, I did not expect to give a full account, in the third Fasciculus, which was published by the American Medical Association, nor can I here do so; still I will try to make clear my meaning to those who have not perused the great work, or who chance not to be instructed in the clinical examination of blood or sputa, for which I beg to refer to my *Primer of the Clinical Microscope*, Chas. Stodder, Rialto Building, Boston, price 25 cents. Now for the explanation.

"Tubercle is a secondary product in consumption." That is, the "little tuber," organic bunches, granulations or granules of low vitality, found in the substance of lungs or other organs of consumptives, are not the prime factors in the disease; or, in other words, the primary factor. We do have tubercle in consumption. It is possible to have consumption without tubercle. In the work alluded to above, the primary element, factor, or morphological, pathological constituent, is regarded to be the presence of a vinegar yeast in the blood.

In Fasciculus I, I have shown the evidence, the truth, of the position taken in the Salisbury plans, that the seeds (so to speak) of consumption are found present in the blood any time during one year preceding the actual lung necrosis. This state I have called the pre-tubercular state, and this fact I corroborate. The microscopical examiner discovers the presence of consumption in the blood before the lung necrosis; this makes this instrument of precision one of the most valuable means of relief found in the whole history of medicine. I speak from personal experience; my oldest son's life was thus saved to himself and family. Now this son had consumption, without any tubercles in the lungs. Those who have consumption of the bowels have consumption without tubercle in the lungs. Again, the author of the Salisbury plans fed 1026 healthy swine on food consisting mainly of starch and sugar, filled with yeast, more or less; soon they had diarrhœa; immediately, he found in the blood vinegar yeast, which is the next development beyond ordinary yeast, that produces carbonic acid, alcohol, water, etc. In the course of eight weeks 246 swine died. Of these, 104 were subjected to autopsy. All were found to have died of consumption, as proved by finding in the chest of each such physical, macroscopical, pathological appearances as are found in people whom everybody says has consumption. Of 100 well hogs that had been fed on good, clean and sweet corn, out of doors, and were slaughtered for food, none were found tuberculous. These experiments I offer to repeat if I am aided, under proper circumstances. Now, after long experience and study, I pronounce this series of experiments without parallel in history. Certainly they furnish foundation enough for the statement that consumption is a systemic disease produced in the cases in question by feeding to them unhealthy aliment. That it is a systemic microphytic parasite of a tissue that pervades the parenchyma of all the organs and anatomical elements, that is, the blood.

To proceed: "Tubercle is a secondary product produced by the embolism." Now, what is em-

bolism? If an eel gets into the valves of a Corliss engine and blocks them, so that the engine stops, as it did in Rhode Island the other day, we may for the moment call the eel the embolus or plug, that stopped the engine. Now, the eel, before it acted as a plug, was in the system of pipes conducting water to the engine; while in this state we should call it a *thrombus* or aggregation of organic matter, before it became a plug or embolus. Now to apply this to our subject. In man we have an engine fearfully and wonderfully made. The human body is a machine with arteries, veins and capillaries to circulate blood. These capillaries are of a standard diameter, $\frac{1}{2500}$ inch; their length is appalling. The late Dr. Rufus King Brown, of New York, used to say that if the capillaries in a man could be separated and put end to end, they would reach 75,000 miles. Dr. Harriman, D.D.S., and myself doubted, and lately we have found our own bodies to contain between 4600 and 4700 cubic inches. Estimating, then, 2325, one half of 4650 cubic inches, to be made up of tubes $\frac{1}{2500}$ of an inch in diameter, we figured that in one square inch we should have 3000 inches, and 3000 times 3000 in a cubic inch, = 9,000,000 inches, = 142 + miles in one cubic inch of capillaries, thus $142 \times 2325 = 330,150$ miles of capillaries in our bodies. Not that every drop of blood has to travel this enormous distance, but that this is the distance given it to travel. (We have given our data, and should be grateful to have any error pointed out.) Now in the blood of consumption (1) the white corpuscles are enlarged by the yeast growing inside; they stick together more than in health; they *mass*; hence our author calls them "massal." (2) The red corpuscles also are pale, sticky, adhesive, plastic, crowded together in confused masses, not generally nummulated, are drawn out into long prolongations. (3) The fibrin filaments are strong, massive, so that they fill the whole field up with a close network; masses of spores of the vinegar yeast are everywhere found. These masses, the fibrin filaments, the white corpuscles, and possibly, the red corpuscles, either singly or combined, form thrombi, or masses that do or may become emboli, or plugs, that catch in the capillaries and block them up. The nutrition is interfered with, and this interference is regarded as the best explanation we have of the formation of tubercle, which one eloquent writer defines, "Infant Tissue Strangled in the Birth." We must never lose sight of the fact that our bodies are continually under renewal and decay. It is this process interfered with, by plugging up the capillaries, that strangles the infant tissue in its birth. Again, the vinegar yeast goes on growing and producing (we have every reason to believe), its acetic acid and other products. This, added to the process of acute and sub-acute inflammation results in necrosis of the lungs, for example, and it breaks down and is removed by coughing. This rationale of breaking down has its analogy in the dry rot of timber. All agree, that it results from fungus growths, and no one is impressed at even the white oak being destroyed.

It is not surprising, then, that the influence of yeast vinegar breaks down the lungs, but it is

remarkable, that it does it so that even in decay the arrangements of the elastic lung fibres are simply beautiful and magnificent veins. (See *Phin's Microscopical Journal*, New York, 1881).

EPHRAIM CUTTER, M.D.

Boston, June 24th, 1881.

More About Maternal Impressions.

ED. MED. AND SURG. REPORTER:—

I have just read, with much interest, a communication in the July 16th number of the *REPORTER*, from the pen of Dr. Chas. H. Miller, of Peabody, Kansas, entitled "Maternal Longings and their Influence on the Fœtus in Utero."

It is almost an every day experience to hear or read something about the influence of maternal impressions on the fœtus; and it seems as if the profession were thoroughly on the *qui vive* to obtain every scrap of information that can throw light on the subject. So far as I have a knowledge of the literature of this subject, the whole of the testimony seems to be upon one side. In fact, not only do our professional brethren furnish us innumerable instances of wonderful formations and mal-formations, the result of maternal impressions, but even the laity, almost to a woman, constantly relate instances that encroach upon the fabulous. Before going further, let me say that I do not doubt the correctness of Dr. Miller's paper in the minutest particular.

During the month of March I was called to attend Mrs. A., in her second confinement. After the birth of her first child—she was then fifteen years of age—she contracted syphilis, and for three or four years was under constitutional treatment. The second labor was natural, but tedious. The child was born with a *spina bifida*. After the mother and child had been "changed" and dressed, I explained to the father the nature of the baby's misfortune. He made light of the subject—at the same time assuring me that his wife had been frightened by a cat-fish, and this was only a "cat-fish birth-mark". The wife held the same opinion, saying that she had fully expected the baby to have just such a mark. In four weeks the child died, and the parents were convinced of their error.

About nine years ago I attended Mrs. D., in her first confinement. The labor was natural. There was nothing striking about mother or child. The mother was, and is, a thin, delicate looking woman. Last winter I met the mother of this lady at a neighbor's, and took occasion to inquire after the little boy above mentioned. She said, "Oh, Doctor! he is very puny. The night his mother was confined she dreamed a gentleman-cow walked through the kitchen door, into the house, and frightened her so that she ran into the closet; and then she awoke; and her waters broke. Now, Doctor, everybody knows the child could not be healthy after that." What a common experience it is with us to hear the mother anxiously inquire, after the child is born, "Is it all right," or, "Is it perfectly formed?" and when the question is answered in the affirmative (as it generally is), "Oh, I am so glad! for I was frightened by a cripple?" or a snake, or a cow, or something. It is a belief

among women, as firmly fixed as the belief in deity, that maternal impressions during pregnancy, especially fright, necessarily affect the foetus; consequently every pregnant woman is on the watch, like a shying horse, for something to get frightened at; and such a something generally comes along, which, of course, she never forgets. Pregnant women always long for something unattainable; why then are not children more frequently marked by these longings?

C. H. SHIVERS, M.D.

Haddonfield, N. J., July 19th. 1881.

ED. MED. AND SURG. REPORTER:—

I send you the following as a well marked case of maternal impression, which occurred in my practice last winter:—

On February last I was called hastily to attend Mrs. S., who was said to have been in labor for over thirty hours. This was her fifth pregnancy, and previous to this one she had been attended by a midwife, her labors being normal and comparatively easy.

She informed me that she anticipated some trouble with this child, as some time before she became terribly frightened, by seeing a man who had received a shocking injury to his thumb.

The child was born not long after my arrival (I found a shoulder presentation, which was corrected), and on examination I found that the thumb of the right hand was attached by only a very slender filament of skin, and I could have easily detached the thumb of the infant with my fingers alone, without any trouble, but the mother wished it to remain.

As near as she could remember the imperfect hand of the child seemed to be the same (the right), as that of the man whom she saw in the early months of her pregnancy. The other children of this patient were healthy and well formed.

J. H. BURCHMORE, M.D.

N. Evanston, Ill.

A Treatment of "Diphtheria."

ED. MED. AND SURG. REPORTER.

Dr. Maynard, who writes in the *Medical Times and Gazette*, December 30th, 1865, "employed in the early stages of the disease the hyposulphite of soda, in solution with glycerine and water, viz.:—

R.	Sodæ hyposulphitis,	3ij
	Glycerini,	f. 3ij
	Aq. puræ,	f. 3vj.
Ft. sol.		M.

He states that it generally removed the incipient exudation in forty-eight hours, or in less time. In advanced cases the throats are washed well with warm water, by means of flexible tubes, and dressed with the following solution:—

R.	Sodæ hyposulph.,	3j
	Glycerini,	3j
	Aq. puræ,	℥j.
		M.

Dr. Maynard says, "This seems to solidify and dry up the false membranes, and when the syringe is again used, which should be done frequently, the force of the water will either wholly or partially wash it away." The membrane

rarely reforms, and the patient makes comparatively a rapid recovery.

Where there is much swelling he uses, as an external application, the solid extract of belladonna. The constitutional treatment should be stimulating and nutritive. The above is a good treatment, and I gave it a fair test during an epidemic in this place, some two or three years ago, and will certainly try it again should that dreaded malady appear here again.

In addition to the above treatment I have been successful with mur. tr. iron and chlorate of potassium, both locally and internally. I take the following:—

R.	Tr. ferri mur.,	3ij
	Potassæ chlorat.,	3j
	Aq. puræ,	3iv.
Ft. sol.		M.

Sig.—One teaspoonful, according to age of patient, every three hours.

Many little ones are unable to gargle or rinse their throats; so, when the preparation is swallowed it comes directly in contact with the diseased membrane, both in the front as well as the back of the throat.

Before using the solution I order the inhalation of equal parts of good vinegar and hot water (a common vessel with a spout, when a good inhaler cannot be had, will do); the vapor from the same softens the membranes (especially in the catarrhal form), and the sufferer is relieved to a great extent of very great distress. As we have a constitutional or rather blood disease to treat or contend with, I cannot find any better remedies than those I have just mentioned. I have had good success with both plans of treatment. I neglected to mention that I never fail to give quinine in appropriate doses, according to age of patient; it gives happy results in many cases.

W. B. POWELL, M.D.

Natchitoches, La., July 7th, 1881.

The Organization of Medical Societies.

ED. MED. AND SURG. REPORTER:—

Your editorial of July 2d, "Suggestions Toward a Plan for Reorganizing Medical Societies," was a good one, and should be thoughtfully considered by every physician who has the best interests of the profession at heart.

The regular profession of Indiana is organized upon a plan very similar to the one you suggest. The County societies are auxiliary to the State society. The representation being a given per cent. of the membership of the County society. At present, I believe, one delegate to every five members. No physician can be an "Active Member" of any other County society than the one in which he resides. All members of the County societies are, by virtue of that membership, members of the State society, and may attend and participate in its proceedings, but none but delegates are permitted to vote. No district societies are permitted representation. Each County society pays one dollar per year as the dues of each member in good standing. Were the National, State, and County societies organized upon such a plan as you suggest, and the Code of Ethics abolished, or the golden rule

adopted instead, in my opinion, the profession would be benefited in many respects. I would like to hear suggestions from younger members of the profession on the abolition of the Code.

Rensselaer, Indiana. I. B. WASHBURN, M.D.

NEWS AND MISCELLANY.

Alumni Association of the Albany Medical College.

At a meeting of the Executive Committee of the Alumni of the Albany Medical College, held June 16th, 1881, the president stated that he had given considerable thought to the matter of prize essays, to increase the interest in and efficiency of the Association. He had concluded to offer an annual prize of \$100, to be called "A Surgical Prize," and would announce as the subject for this year, "Essay on Colles Fracture," Its Pathology and Treatment," to be accompanied with pathological specimen illustrating the fracture, with or without dislocation of the ulna, or a careful dissection of the hand, wrist, or forearm.

After favorable remarks by members of the committee, on motion of Dr. S. Hale, Dr. Vanderveer, the president, was appointed a committee of one, to give the matter further consideration.

Subsequently, he reported that the heirs of the late Prof. Alden March, M.D., LL.D., desired to give the sum of \$100 as an annual "March Memorial Prize," the essay for the coming year to be on "The Pathology and Treatment of Morbus Coxarius." Also, that Mr. McClure, a governor of the Albany Hospital, had decided to give the sum of \$100 annually, as an "Armsby Memorial Prize," the essay to be on some anatomical subject. That for the coming year will consist of a minute description of the genito-urinary organs of the male, together with a carefully dissected specimen of the same.

The President further reported that the heirs of the late Prof. James MacNaughton, M.D., had offered the sum of \$100 as a "MacNaughton Memorial Prize." The subject of the essay for the current year to be "Antisepsis in the Treatment of Diseases." And Mr. Joseph Russell, a trustee of the College, offers for this year a Second Surgical Prize of \$50 for the second best essay on "Colles Fractures."

Essays and specimens, designated by a motto, and accompanied by a sealed envelope inclosed with the same motto, and containing the name and address of the author, must be sent to the Secretary, Dr. W. G. Tucker, by the 14th day of February, 1882.

The Committee to examine the essays for this year will consist of Drs. A. Van Derveer, J. S. Mosher, and Lorenzo Hale, and they reserve the right to reject any or all the essays, if not deemed worthy.

All specimens are to be deposited in the New Museum of the College, properly labeled.

The American Surgical Association.

This Association will hold its first regular meeting at the Oriental Hotel, Coney Island, September 13th, 14th, and 15th. Papers are promised from several gentlemen.

Transvoyance.

Our readers will remember that Dr. Geo. M. Beard refers, in a recent letter to the REPORTER (vol. xlv, p. 588), to the phenomena of "transvoyance;" he has witnessed. One of his subjects was a Mrs. Carpenter. Dr. Beard and a medical friend of his, who was a surgeon, bandaged her eyes with all the skill they could devise, first using cotton-batting and then three bandages of cotton cloth. When this was completed, Dr. Beard drew from his pocket a pack of cards, and held them, one after another, to her forehead in such a manner that neither he himself nor any one else in the room could see their faces, yet in almost every case she told the card at once, hesitating only between the nine and ten spot cards. He then held some large type print to her forehead, and this he found she could read slowly, though she failed to decipher fine print. On coming out of the trance Mrs. Carpenter could remember nothing that had taken place. On a subsequent occasion the same experiments were repeated, but failed completely, a result which the subject attributed to the wet weather which then prevailed, saying that she had found that this was always unfavorable to trance experimenting in her case. The third time the tests were applied, however, the same success was met with as at first. Dr. Beard states that he exhausted every means of preventing deception which occurred to him or his friends, and he is convinced that it could not possibly have been practiced.

Healthiness of Roman Hotels.

The foreign physicians in Rome lately appointed a committee to investigate the sanitary condition of the Roman hotels. This seems to have excited the ire of the native medical men. We have before us a copy of *Il Popolo Romano*, July 4th, containing an account of the meeting of the Italian Medical Association at Rome, wherein the action of the foreign physicians is criticised, the hotels declared in good condition and the healthiness of Rome in general defended. We do not sympathize with their position; and this obstructiveness to sanitary work is a discredit to the Roman profession, and will deteriorate from their reputation.

The Storage of Electricity.

The discovery of a convenient method of storing and transporting electricity, by M. Faure, will, no doubt, exert a marked influence on the use of this agent in medicine, as well as in the arts in general. Already Prof. Thompson has applied the storage cell to use in employing the cautery; and as a means of furnishing light for endoscopes, etc., and applying electrical treatment at the homes of patients, it will have many applications.

The Battle of the Surgeons.

Two very large works on surgery have simultaneously been announced, the one an "International Encyclopædia," by W. Wood & Co., the other a revised edition of Holmes' "Sys-

tem," by H. C. Lea's Son & Co. The former further say that the revision of Holmes is "impracticable," while Messrs Lea & Co. rejoice that one or more of Messrs Wood's announced international contributors have withdrawn from the enterprise. No doubt the contest will be active between such vigorous competitors.

The Ohio State Medical Society.

The Ohio State Medical Society has arranged with the *Ohio Medical Recorder* to become the journal of the Society, under the name of the *Ohio Medical Journal*. The former editor of the *Recorder* is also Secretary of the Society, and continues to edit the *Journal*. The Society, in a circular issued by the publishers, takes credit to itself for "becoming the first State to take the new departure in issuing its proceedings," but to others it may rather appear as if the energetic editor had captured the Society.

Personal.

—The great evolutionist, Professor Hæckel, has gone to Ceylon to pursue biological investigations.

—Dr. Madame Bré, a regular graduate of the Paris medical school, is an officer of the Académie de Médecine.

—On June 5th the 50th anniversary of the doctorate of Professor Progovoff was celebrated at Moscow, with imposing ceremonies.

—The honorary membership of the New York Medico-Legal Society has been unanimously conferred on Mr. Jabez Hogg, Consulting Surgeon to the Royal Westminster Ophthalmic Hospital.

—Professor Virchow's sixtieth birthday, and the twenty-fifth anniversary of his appointment to his chair at Berlin, are to be celebrated together, October 13th, by the Medical Society of Berlin.

Items.

—The weather has been unusually hot in England this year, and several cases of sunstroke and heat exhaustion are reported.

—Within the last six months there have been 1073 deaths, a large proportion of them from yellow fever, in Vera Cruz.

—The Governor of Iowa, after a personal examination, has decided that there is no ground for the charges of mismanagement in the Southern Iowa Insane Asylum.

—Six of those who survived the terrible tornado at New Ulm, Minnesota, have become insane, from the shock. A number of deaths are reported in other sections visited by the tornado.

—The Trustees of the Pennsylvania State Hospital for the Insane, at Norristown, have awarded to E. Ginrich, of Lebanon, for \$72,592, the contract for erecting a new building, to be used as a ward for violent female patients. There are now 767 patients in the institution.

—During the seven days from July 10th to July 16th inclusive, there were 264 deaths in Cin-

cinnati, from sunstroke, and 150 from the effects of the excessive heat in that city. The maximum of deaths from these causes on one day was 86, on the 14th instant. During those terrible seven days the deaths from other causes besides the heat numbered 153. The figures are official. In the same week over 100 cases of sunstroke occurred in Columbus, Ohio.

—The production of wine is rapidly increasing in the United States. The American vineyards are constantly improving, and it is certain that table wines of low alcoholic strength produced in this country are purer than those imported. Pennsylvania had 1944 acres planted, producing 114,535 gallons, valued at \$128,097. The California product was 15,067,155 gallons, valued at over \$5,000,000. The total area devoted to vines in the United States is 181,583 acres, and the total production was 23,453,827 gallons, which were valued at \$13,426,174.

QUERIES AND REPLIES.

Ethics.

Dr. D. G. T., of Tenn.—1. When several physicians in a community definitely agree to a fixed rate of fees, it is superfluous to say that it is dishonorable for any one of them to charge less than the amounts agreed upon, unless he notifies the others of his intention to do so. 2. The remaining physicians who have suffered from such action do nothing more than exercise a just privilege when they inform their patients that the fee bill was agreed to by the physician who had surreptitiously disregarded it.

Impotency.

Dr. J. D., of Mo., asks suggestions for treating a case of complete inability of erection in a young man of 19, otherwise healthy. The cause appears to be excessive venery, from the age of 13. We suggest the use of the cold steel sound, with electricity.

Dr. B. J., of Md.—*Guaco* is a term used in Brazil for any antidote to a poison, and has been applied to the *Micania guaco*, a plant of the composite. A recent writer from New Granada says it is extensively used in that country. An infusion of the leaves is used internally, and a poultice of them applied to the bite.

Student inquires for the best vehicle in which to administer mono-bromated camphor.

Dr. C. R. inquires whether there are any known applications or manipulations which will restore the natural fullness to the mammae of a female who has borne children.

MR. EDITOR.—*Dear Sir.*—In reply to H., of Iowa, I can speak more highly of electricity than of any or all other remedies, though in this country many rely on hot baths at the hot springs. Results good.

Colorado.

F. ROYS, M.D.

MARRIAGE.

WILLIAMS—SCOTT.—In Shreveport, La., on Thursday, June 3rd, by Rev. Dr. W. C. Dunlap, Mr. Burgess L. Williams, of Fulton, Ark., and Miss V. Pallie Scott, daughter of Dr. J. J. Scott, of Shreveport.

DEATH.

THOMAS.—At White Sulphur Springs, West Va., on July 16th, Dr. John Hanson Thomas, of Baltimore, in his seventieth year.